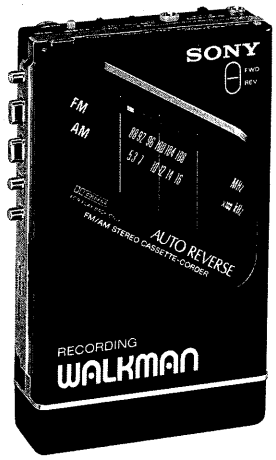
WM-F200II/F203

SERVICE MANUAL

Refer to MDR-A10L/B, MDR-E434/B Service Manual issued previously for information of headphones supplied with this set.



US Model
Canadian Model
- *WM-F200II*

E Model
- *WM-F203*

FEATURES

- The WALKMAN with built-in FM/AM tuner also has a recording function.
- Auto-reverse function changes the tape playback direction without turning the cassette over.
- Small-sized, one-point stereo microphone supplied.
- Dolby NR system reduces tape hiss noise during playback.
- PB EQ selector for optimum playback with standard tapes as well as high-performance metal tapes.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

SPECIFICATIONS

Tape recorder section

Tape track
4-track 2 channel stereo
Fast winding time
Approx. 3 min. 20 sec. with Sony C-60 cassette
Frequency response (DOLBY NR off)
40–15,000 Hz (playback, with PB EQ set to CrO_2/METAL)
40–15,000 Hz (playback, with PB EQ set to NORM)

Radio section

Frequency range
FM: 87.6–108 MHz
AM: 530–1,605 kHz
Antennas
FM: Headphone cord antenna
AM: Built-in ferrite bar antenna

General

Input
External microphone input (stereo minijack) (PLUG IN POWER) sensitivity 0.2 mV (–72 dB) for low impedance microphones
Output
Headphones (stereo minijack)
load impedance 8—300 ohms
Power output
4 mW + 4 mW at DC operation (at 10% harmonic distortion)
Power requirements
1.5 V DC
Size AA (R6) battery
Rechargeable battery
DC IN 1.5 V jack accepts:
Sony AC-D1M AC power adaptor (optional)
for use on 120 V AC, 60 Hz

Similar Mechanism Set	WM-F200/F202
Tape Transport Mechanism Type	MF-WMF202-01

0 dB = 0.775 V

Sony EBP-10 battery case (optional)
for use with two size AA (R6) batteries
Sony DCC-70 car battery cord (optional) for use with 12 V car battery

Battery life (hours)

Battery	FM reception	Tape playback	Radio recording	MIC recording
Rechargeable battery NC-5WM	Approx. 10	Approx. 2	Approx. 1.5	Approx. 2
Sony battery SUM-3 (NS)	Approx. 10	Approx. 2	Approx. 1	Approx. 2
Sony alkaline battery AM3 (N)	Approx. 25	Approx. 5.5	Approx. 2	Approx. 5.5

Dimensions
not incl. projecting parts and controls
Approx. 71.6 × 112.1 × 23.3 mm (w/h/d)
($2\frac{7}{8} \times 4\frac{1}{2} \times \frac{15}{16}$ inches)
with rechargeable battery case attached
Approx. 71.6 × 119.7 × 23.3 mm (w/h/d)
($2\frac{7}{8} \times 4\frac{3}{4} \times \frac{15}{16}$ inches)
with battery case attached

— Continued on next page. —

FM/AM STEREO CASSETTE-CORDER

SONY®

incl. projecting parts and controls
Approx. 76.9 × 113.7 × 26.1 mm (w/h/d)
($3\frac{1}{8}$ × $4\frac{1}{2}$ × $1\frac{1}{16}$ inches)
with rechargeable battery case attached
Approx. 76.9 × 121.3 × 26.1 mm (w/h/d)
($3\frac{1}{8}$ × $4\frac{7}{8}$ × $1\frac{1}{16}$ inches)
with battery case attached

Weight
Approx. 230 g (8.1 oz) incl. rechargeable battery case and rechargeable battery, not incl. other accessories
Approx. 230 g (8.1 oz) incl. battery and battery case, not incl. other accessories

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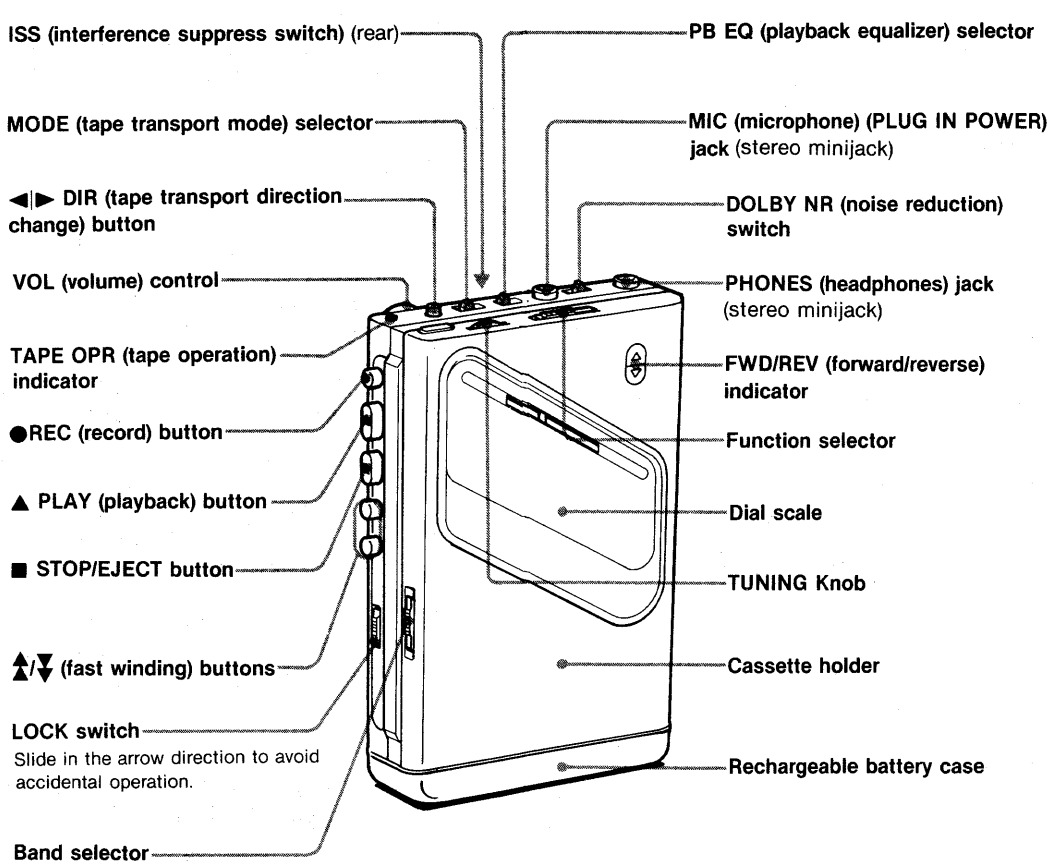
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

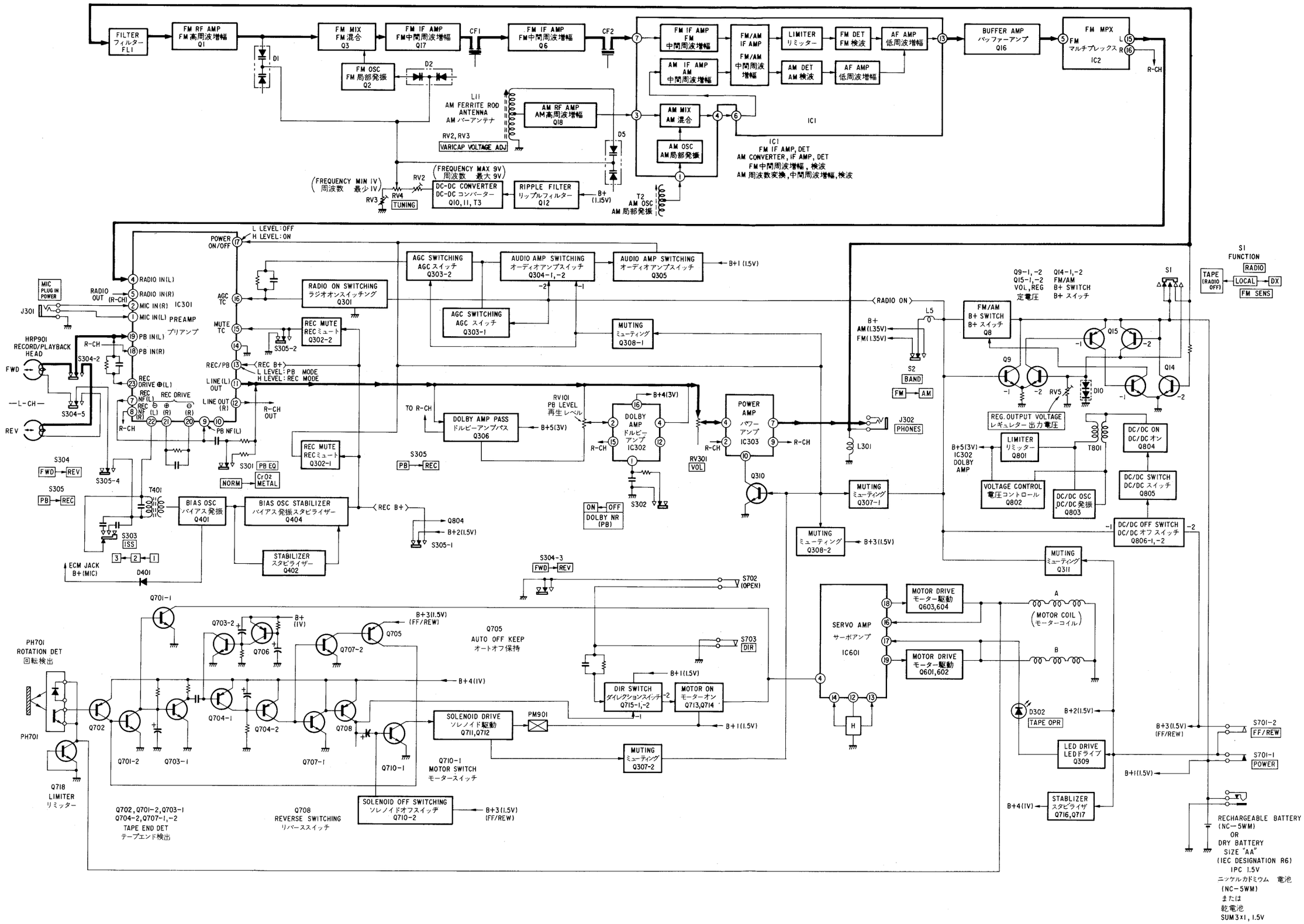
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

PARTS IDENTIFICATION


ISS (interference suppress switch) (rear)
MODE (tape transport mode) selector
◀|▶ DIR (tape transport direction change) button
VOL (volume) control
TAPE OPR (tape operation) indicator
●REC (record) button
▲ PLAY (playback) button
■ STOP/EJECT button
▲▲/▼▼ (fast winding) buttons
LOCK switch
Slide in the arrow direction to avoid accidental operation.
Band selector
PB EQ (playback equalizer) selector
MIC (microphone) (PLUG IN POWER) jack (stereo minijack)
DOLBY NR (noise reduction) switch
PHONES (headphones) jack (stereo minijack)
FWD/REV (forward/reverse) indicator
Function selector
Dial scale
TUNING Knob
Cassette holder
Rechargeable battery case

SECTION 1
BLOCK DIAGRAM



SERVICING NOTE

1. OPERATION CHECK AFTER DISASSEMBLED

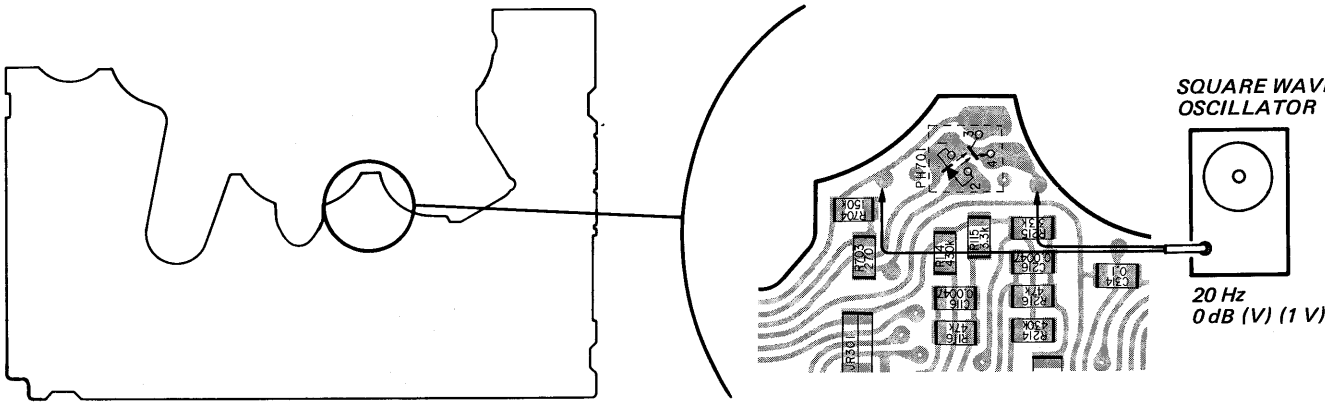
This set detects rotation of reel table by PH701 (Photo interrupter).

It cannot be detected when the audio board is removed, because PH701 is mounted on the audio board.

Therefore, the auto off circuit and tape end detection will misoperate.

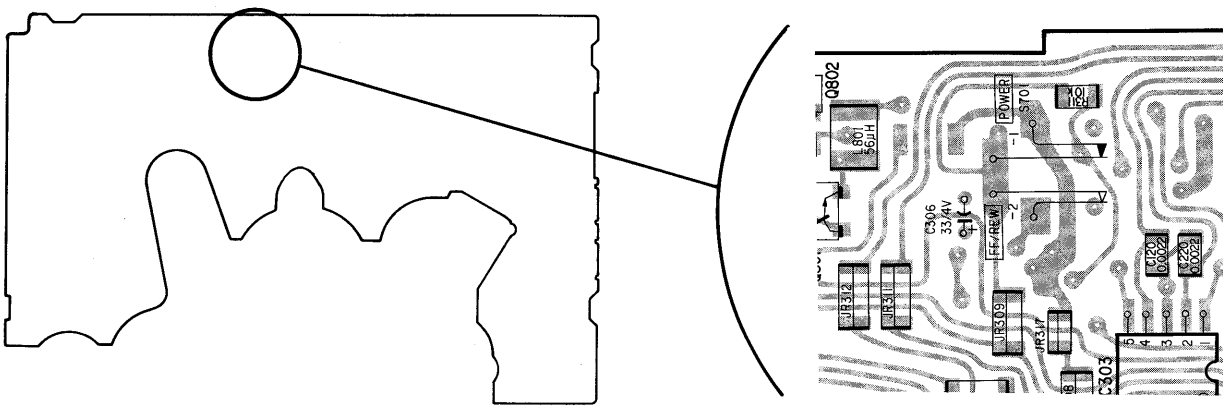
Operation check can be done by the method shown below even when the audio board is removed.

– Audio board (side A) –



- For PLAY, press the ▶ button and turn only the POWER switch ON.
- For FF and REW, press ▶▶ or ◀◀ button and turn both POWER switch and FF/REW switch ON.

– Audio board (side B) –



2. Replacing chip components

All chip components should be connected and disconnected, using a tapered soldering iron [temperature of the iron tip: less than 280°C (536°F)], a pair of tweezers and braided wire.

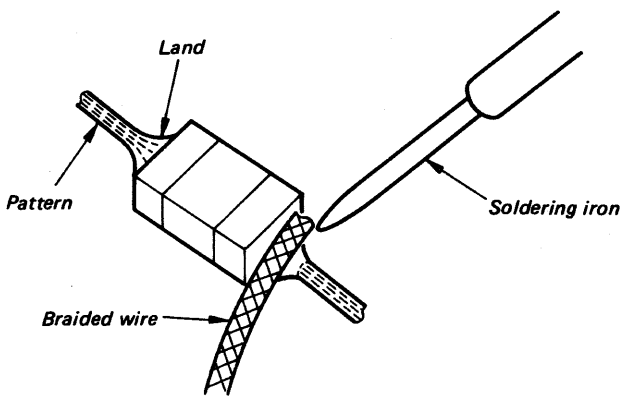
Precautions for replacement

1. **Do not disconnect the chip component forcefully. Otherwise, the pattern may peel off.**
2. **Never re-use a disconnected chip component. Dispose of all old chip components.**
3. **To protect the chip component, heating time for attaching the component should be within 3 seconds.**

○ Removing chip components

(1) Removing solder at electrode

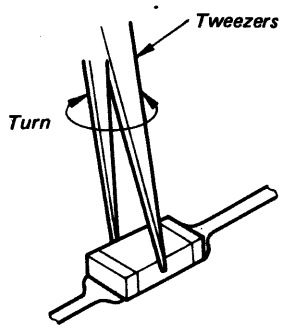
Remove the solder at the electrode, using a thin braided wire. Do not remove the solder of the part (chip component) attached adjacent to the electrode.



(2) Disconnecting chip components

Turn the tweezers with the soldering iron alternately applied to both electrodes, and the chip component will be disconnected. Take careful precautions while disconnecting, because if the chip component is forcefully removed the land may peel off.

Never re-use a disconnected chip component.



(3) Smoothing the soldered surface

After disconnecting the chip component, remove the solder by using a braided wire to smooth the land surface.

○ Connecting chip components

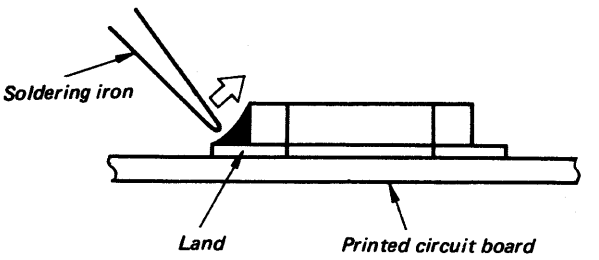
The value of chip components is not displayed on the main body. Take due precautions to avoid mixing new chip components with other ones.

(1) Applying solder to land on one side

Apply a thin layer of solder to the land on one side where the chip component is to be connected. Too much solder may cause bridging.

(2) Speedy soldering

Hold the chip component at the desired position, using tweezers, and apply the soldering iron in the arrow-marked direction. To protect the chip component, heating time should be within 3 seconds.



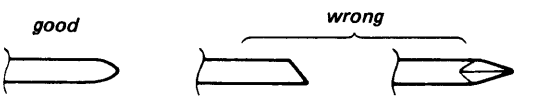
(3) Speedy soldering of electrode on the other side

Solder the electrode on the other side in the same way as in (2) above.

3. Flexible Circuit Board Repairing

1. Keep the temperature of the soldering iron at 270° ± 10°C during repairing.
2. Do not touch the soldering iron more than 4 seconds or 3 times on the same conductor of the circuit board.
3. Do not apply force on the conductor when soldering or unsoldering.

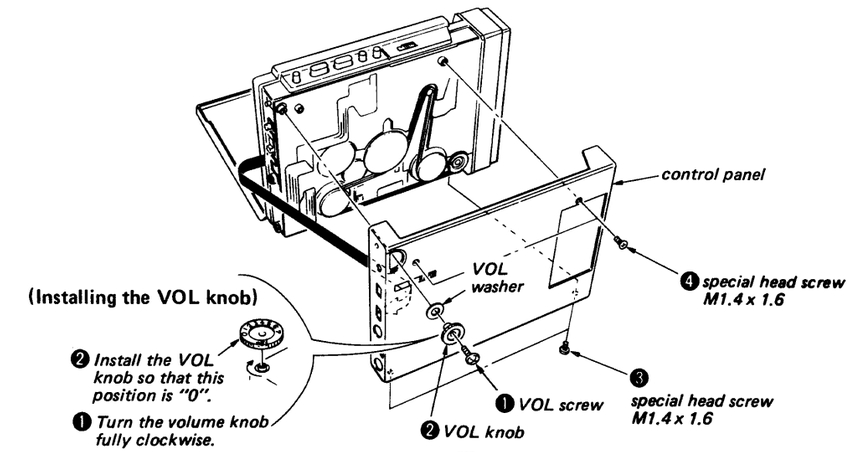
Tip of soldering iron



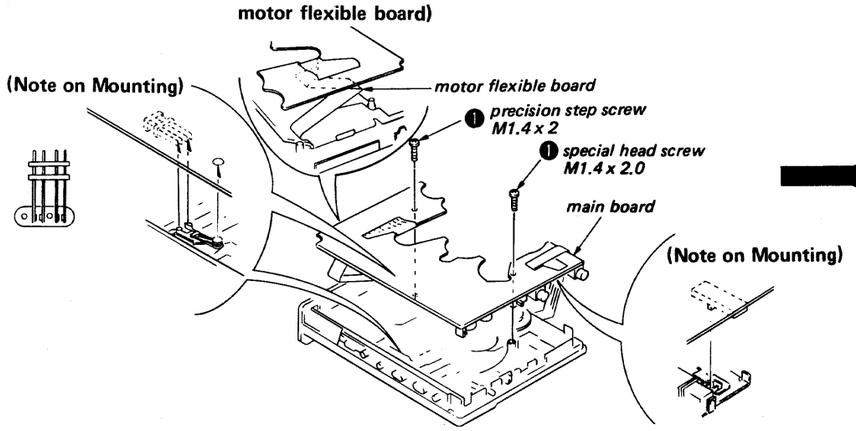
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

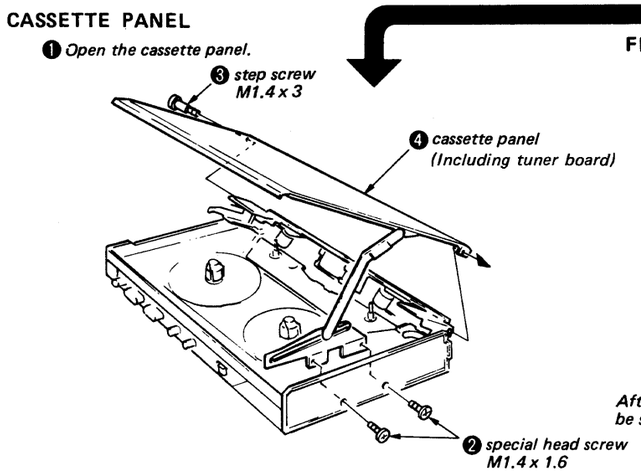
CONTROL PANEL


control panel
VOL washer
❹ special head screw M1.4 x 1.6
(Installing the VOL knob)
❷ Install the VOL knob so that this position is "0".
❶ Turn the volume knob fully clockwise.
❶ VOL screw
❷ VOL knob
❸ special head screw M1.4 x 1.6

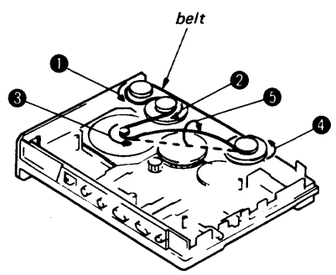
AUDIO BOARD


(How to handle motor flexible board)
(Note on Mounting)
motor flexible board
❶ precision step screw M1.4 x 2
❶ special head screw M1.4 x 2.0
main board
(Note on Mounting)

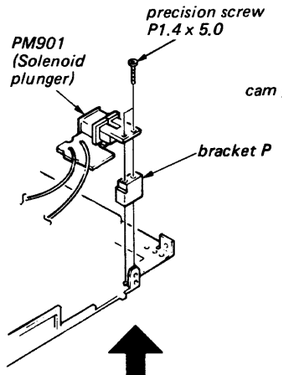
CASSETTE PANEL



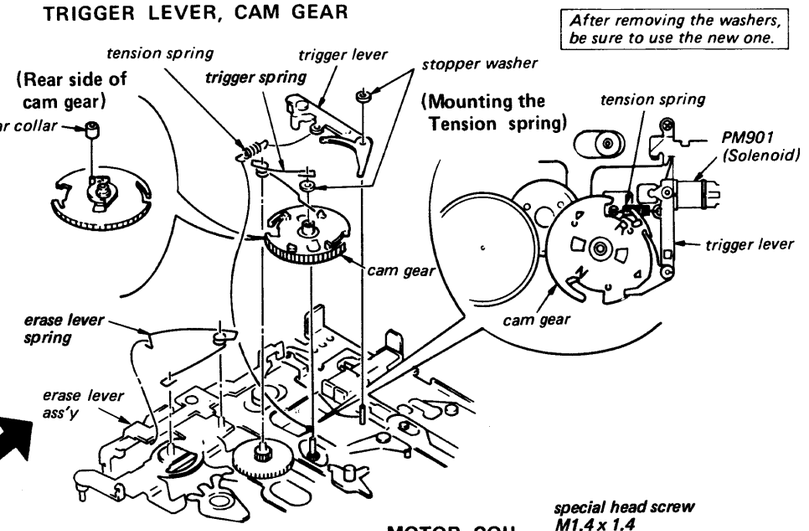
INSTALLING THE BELT



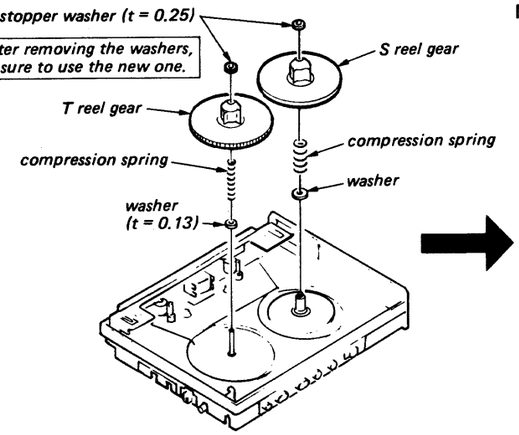
SOLENOID PLUNGER



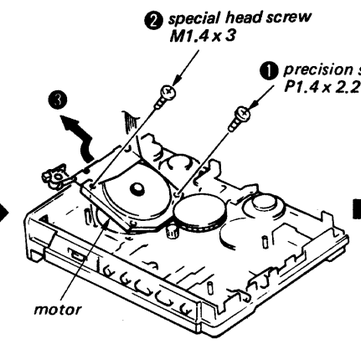
TRIGGER LEVER, CAM GEAR



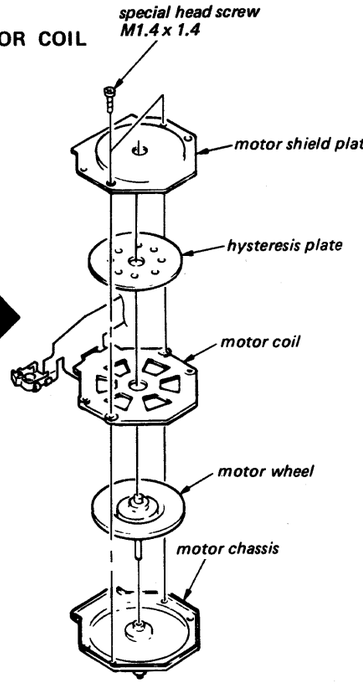
REEL GEAR



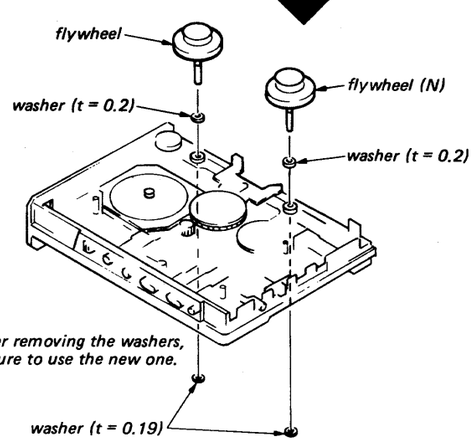
MOTOR



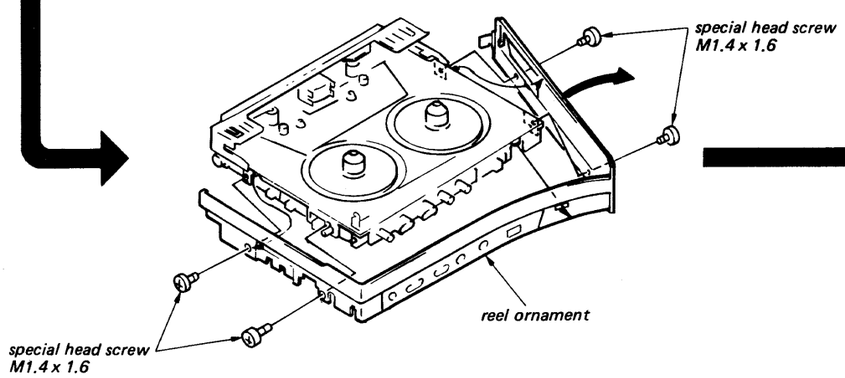
MOTOR COIL



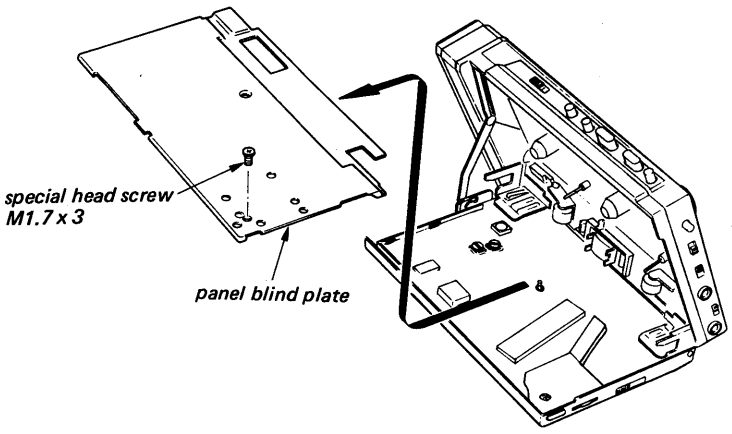
FLYWHEEL



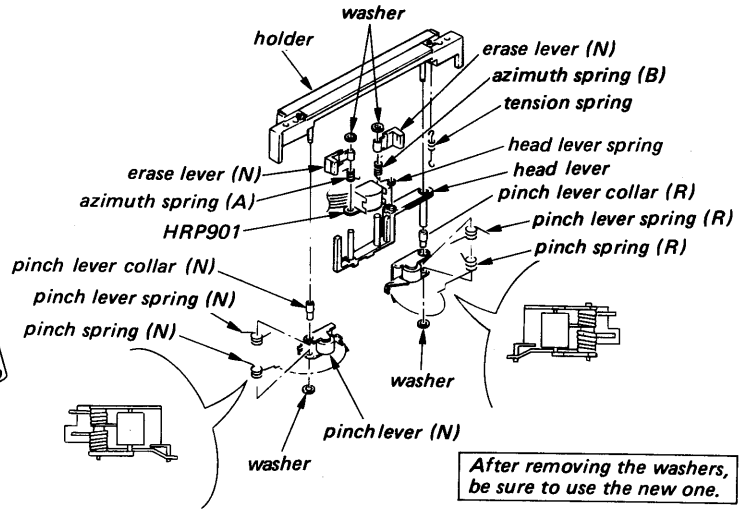
REEL ORNAMENT



TUNER BOARD

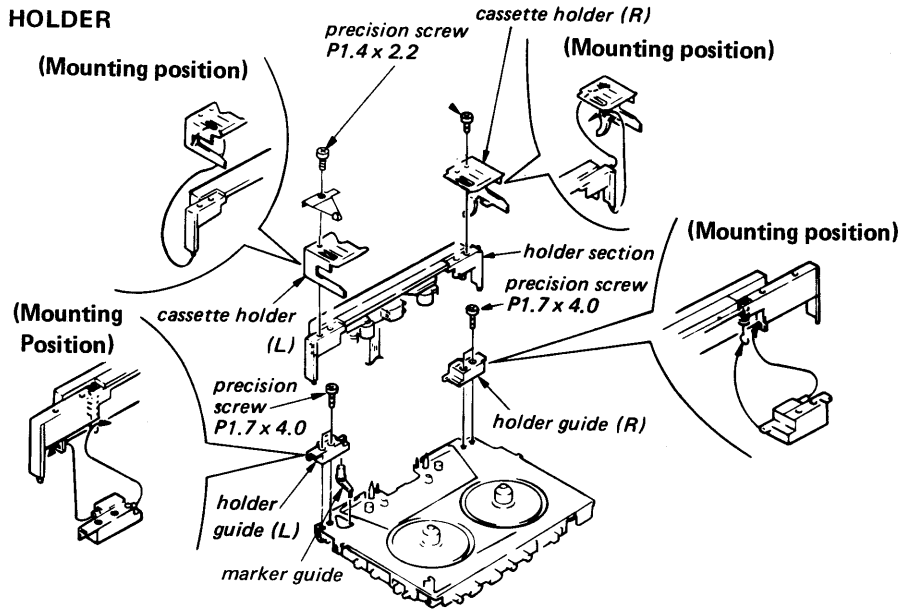


HEAD AND PINCH ROLLER

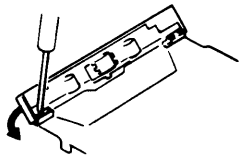


After removing the washers, be sure to use the new one.

HOLDER



Removal



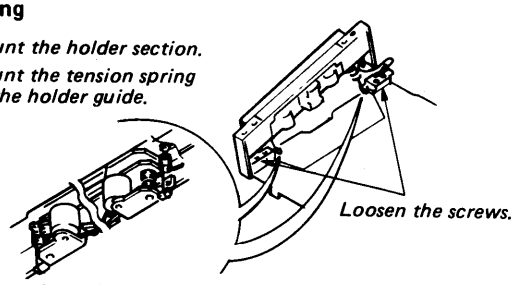
❶ *Remove the cassette holder and remove the holder guide screws.*

❷ *Remove the holder section in the direction of the arrow.*

Mounting

❶ *Mount the holder section.*

❷ *Mount the tension spring on the holder guide.*



It is easier to install when the tension spring is hooked on the holder guide as illustrated.

SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS AND MEASUREMENT

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab:

   playback head — rubber belts
   capstan — idlers
   pinch roller

2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage (1.3V) unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	25 – 38 g•cm 0.35 – 0.52 oz•inch
FWD Back Tension		1.5 – 3 g•cm 0.02 – 0.04 oz•inch
REV	CQ-102RB	25 – 38 g•cm 0.35 – 0.52 oz•inch
REV Back Tension		1.5 – 3 g•cm 0.02 – 0.04 oz•inch
FF	CQ-201B	more than 70 g•cm more than 0.97 oz• nch
REW		more than 70 g•cm more than 0.97 oz•inch

Tape Pulling Force Measurement

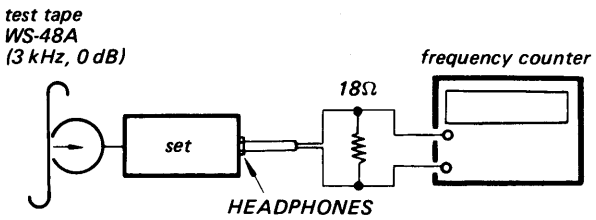
Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 60 g more than 2.1 oz
REV	CQ-403R	more than 60 g more than 2:1 oz

Standard Playback Level:

1. Standard test tape: P-4-L300 (315 Hz, 0 dB)
2. Set the VOL control to the position where -20 dB (77.0 mV) is obtained across 18 Ω load at PHONES jack.

Tape Speed Adjustment

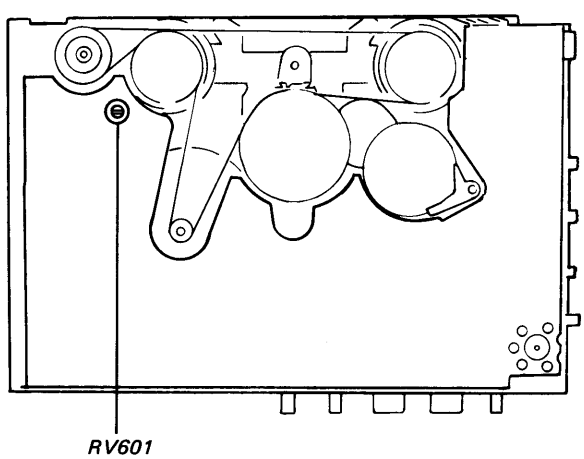
Procedure:



1. Play back WS-48A (Tape center portion) in FWD mode.
   Adjust the RV601 so that the frequency counter reads 3,030 Hz (±5 Hz).
2. Play back WS-48A (Tape center portion) in REV mode.
   Confirm that the reading of frequency counter is within 1.5% from the reading in step 1.

Adjustment Location:

Audio Board – Side A –

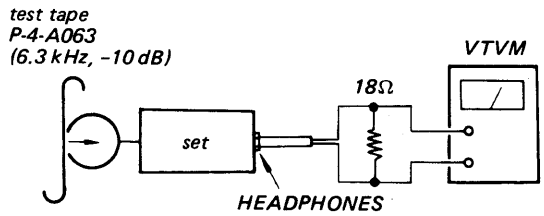


Playback Head Azimuth Adjustment

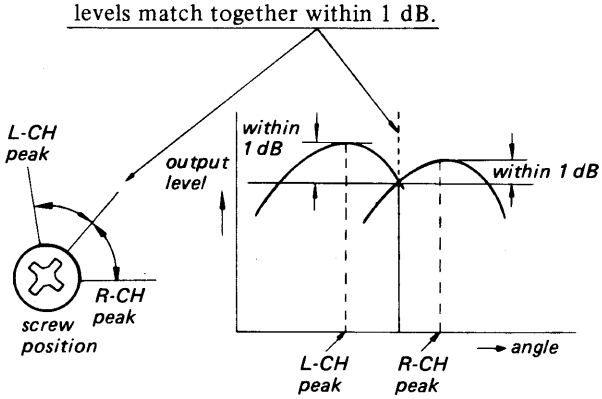
Note: Adjustment should be made in both directions of FWD and REV.
Adjustment screws should be stopped by turning in the clockwise direction.
After the adjustment, lock the screws with locking compound.

Procedure:

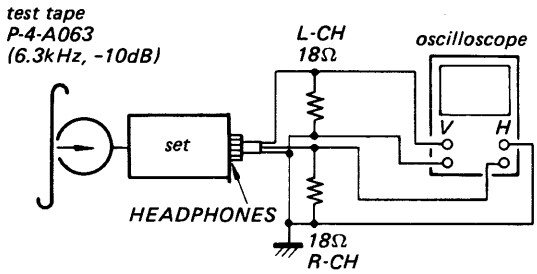
1. Playback mode

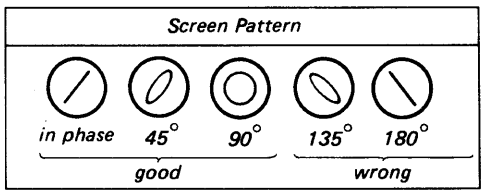


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.

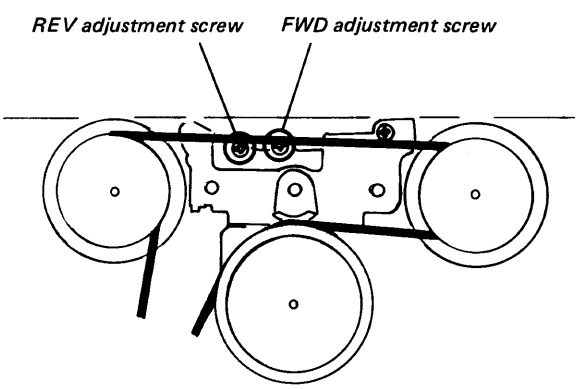


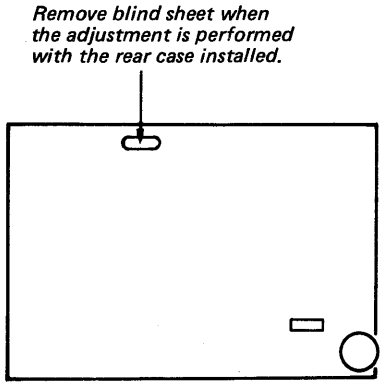
3. Phase Check





Adjustment Location:



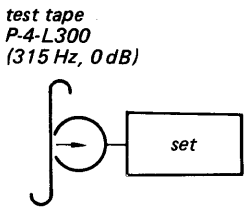


Playback Level Adjustment

DOLBY NR switch . . . OFF
VOL knob . . . . . MINIMUM
TAPE . . . . . NORMAL TAPE

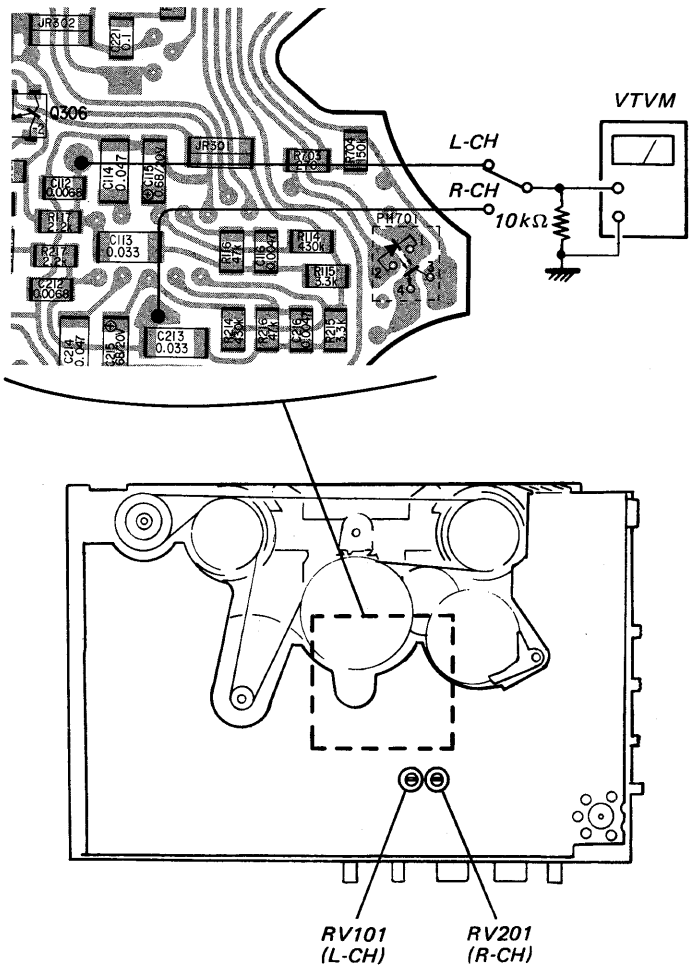
Procedure:

1. Playback mode



2. Adjust RV101 (L-CH), RV201 (R-CH) so that the VTVM reading is -20.5 ±1 dB (65 ~ 82 mV).
3. Set the DOLBY switch to ON postion. VTVM reading should be within 1 dB from that obtained in step 2.

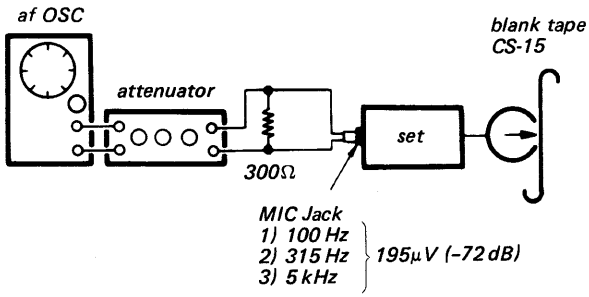
Adjustment Location: *Audio Board – Side A –*



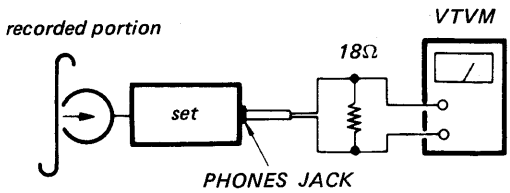
Record Bias Adjustment

Procedure:

1. Record mode

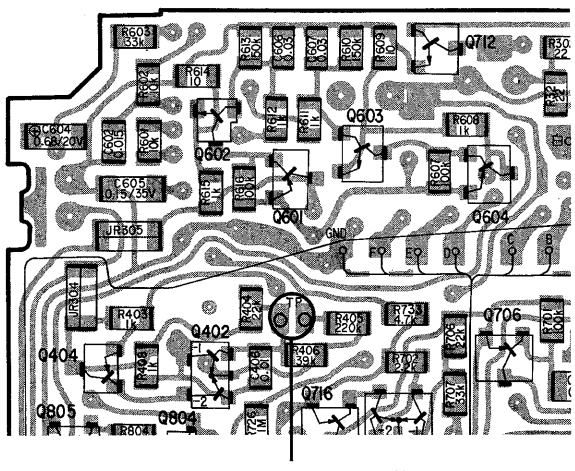


2. Playback mode



a) Play back the 315 Hz portion and set VOL control so that the output level becomes 24.5 mV (-30 dB).
b) Play back the 100 Hz and 5 kHz portions in forward (FWD) direction. Output level should be 17.3 mV to 34.6 mV (-22 – -27 dB). If not, repeat above steps by connecting or disconnecting the adjustment pattern once in one step.

Adjustment Location: *Audio Board – Side A –*



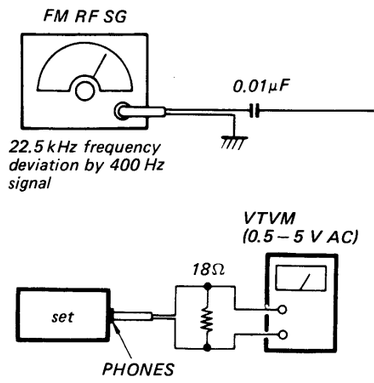
Pattern connect: on	VTVM reading (6.3 kHz)
diconnected	up
↕	↕
connected	down

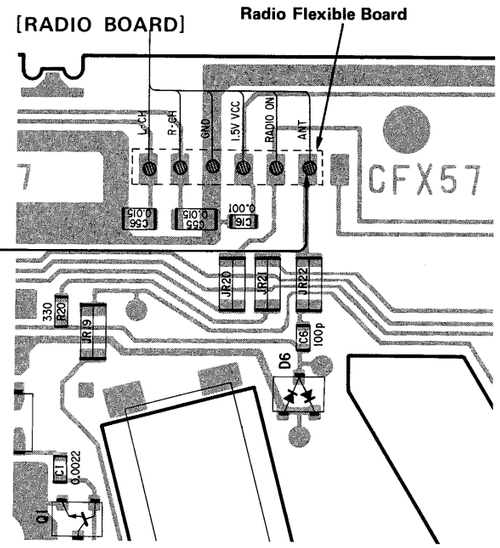
3-2. ELECTRICAL ADJUSTMENTS

FM Section

Setting:

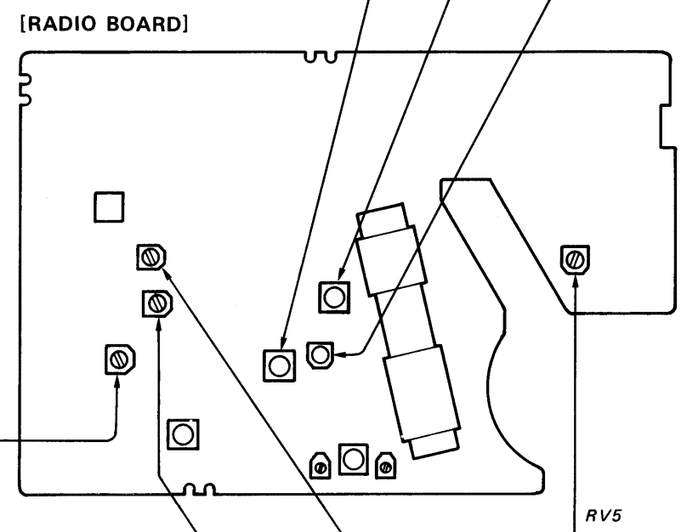
FUNCTION Selector: FM
BAND Selector: FM





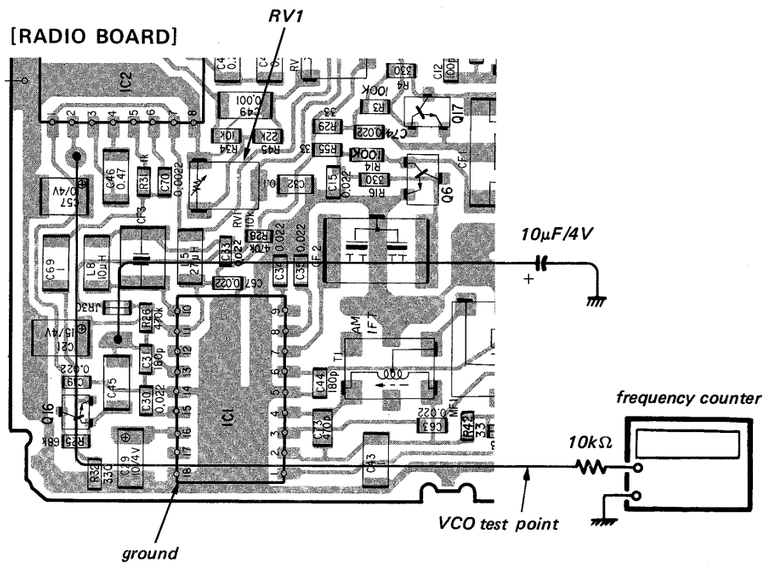
- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM FREQUENCY COVERAGE AND TRACKING ADJUSTMENT			
Note: Perform this adjustment after the FM TUNING VOLTAGE ADJUSTMENT below.			
Adjust for a maximum reading on VTVM.			
leftmost (f min.)		rightmost (f max.)	dial-pointer position
86.5 MHz ±0.3 MHz		109.5 MHz ±0.3 MHz	SSG frequency
L2	L1	CT1	adjustment parts



VCO Frequency Adjustment

Adjust RV1 for 19 kHz ±0.02 kHz reading on the frequency counter.



Regulator Output-voltage Adjustment

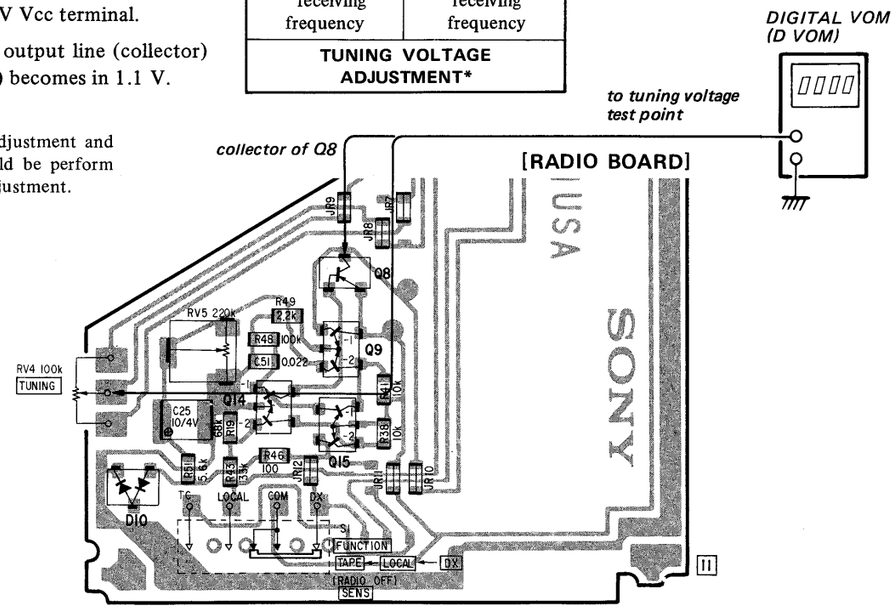
Procedure:

1. Remove battery.
2. Apply 1.2 V dc from external regulated DC power supply to the 1.5 V Vcc terminal.
3. Adjust RV5 so that the output line (collector) of Q8 (pin 1 of IC2, etc.) becomes in 1.1 V.

* FM frequency coverage adjustment and tracking adjustment should be perform after the tuning voltage adjustment.

RV3	RV2
Digital VOM 1V (±) (0.01V)	Digital VOM 9V (±) (0.01V)
Minimum receiving frequency	Maximum receiving frequency
TUNING VOLTAGE ADJUSTMENT*	

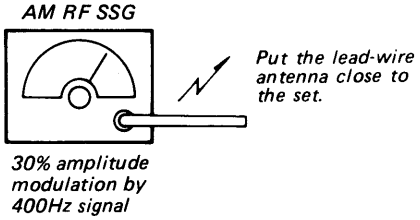
Use a digital VOM for the adjustment.

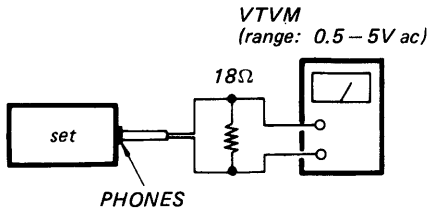


AM Section

Setting:

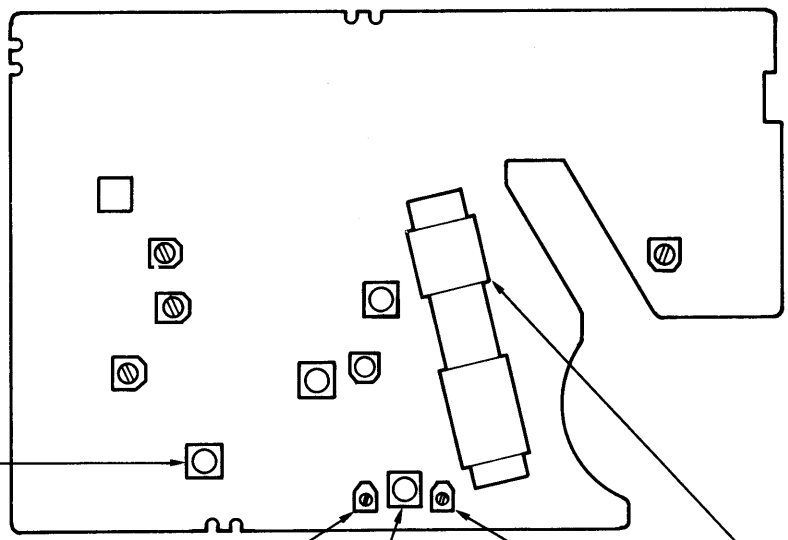
FUNCTION Selector: RADIO, DX
BAND Selector: AM





- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

[RADIO BOARD]



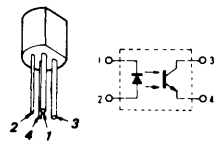
T1
Adjust for a maximum reading on VTVM.
AM IF ADJUSTMENT

CT3	T2
1,680 kHz ±20 kHz	515 kHz ±3 kHz
Adjust for a maximum reading on VTVM.	
AM FREQUENCY COVERAGE ADJUSTMENT	

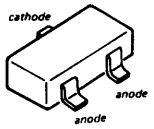
CT4	L11
1,400 kHz	620 kHz
Adjust for a maximum reading on VTVM.	
AM TRACKING ADJUSTMENT	

• Semiconductor Lead Layouts

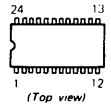
NJL5141E-AA



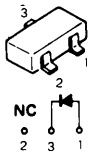
1S2837



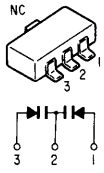
CXA1010M



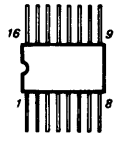
DA106K



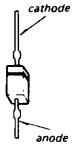
SVC341-K



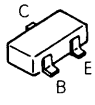
NJM2063AM
CX10054



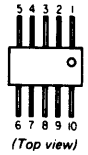
1SS283



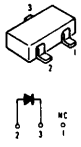
2SC1623
2SA812
2SD596
2SB624-BV4
DTA114TK
DTA114YK
2SC2223
2SC2757-T33
2SC2757
2SB1295-UL6
2SC4154
2SA1602



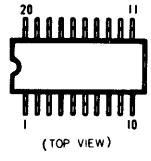
LA4535M



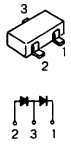
RD3.9M-B1
RD12M-B1



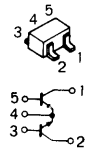
CX20123



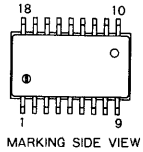
1SS123



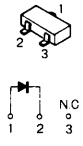
FMW1
FMG4
FMA4



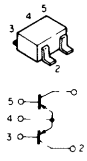
CX10053B



SVC203CP



FMS1



GL2PR9

4-1. MOUNTING DIAGRAM

SECTION 4
DIAGRAMS

• Semiconductors Location

Ref. No.	Location	Ref. No.	Location
D1	E-4	Q302	H-22
D2	F-3	Q303	E-10
D5	F-3	Q304	F-10
D6	G-6	Q305	E-11
D8	A-6	Q306	F-11
D9	B-6	Q307	E-12
D10	J-4	Q308	D-11
D301	D-12	Q309	D-11
D302	J-24	Q311	D-11
D401	I-10	Q401	J-11
D801	D-10	Q402	C-11
		Q404	C-10
IC1	B-2	Q601	B-11
IC2	B-4	Q602	B-11
IC301	H-23	Q603	B-11
IC302	G-22	Q604	B-12
IC303	F-22	Q701	E-13
IC601	B-23	Q702	E-12
		Q703	C-13
PH701	G-13	Q704	C-14
		Q705	D-11
Q1	F-5	Q706	C-12
Q2	F-3	Q707	D-14
Q3	D-4	Q708	C-14
Q6	D-3	Q710	B-14
Q8	I-6	Q711	A-14
Q9	I-6	Q712	A-12
Q10	B-5	Q713	A-15
Q11	A-5	Q714	A-15
Q12	B-5	Q715	A-19
Q14	J-5	Q716	C-11
Q15	J-6	Q717	C-12
Q16	A-2	Q718	E-12
Q17	D-4	Q801	D-23
Q18	F-3	Q802	D-24
Q301	D-11	Q803	C-24
		Q804	C-10
		Q805	C-10
		Q806	D-11

Note:
- ○— : parts extracted from the component side.
- ●— : parts extracted from the conductor side.
- ■ : part mounted on the conductor side.
- ⊗ : Through hole.

【RADIO BOARD】
【ラジオ基板】

TO THE CASE

CFX520USA 1-623-497-11

CFX571USA

SONY

L1 AM FERRITE ROD ANTENNA
AM バーアンテナ

L2 FM OSC

【AUDIO BOARD】
【オーディオ基板】
SIDE A

【MP FLEXIBLE BOARD】
【MP】

PM501 PLUNGER SOLENOID

【MOTOR FLEXIBLE BOARD】
【モーター】

MOTOR BLOCK

DR501
DC IN 1.5V

DRY BATTERY 1.5V
SIZE "AA"
IEC LR6 (AM3)
1.5 x 4
or
RECHARGABLE
BATTERY
SONY NC-5WM

BATTERY CASE

【AUDIO BOARD】
【オーディオ基板】
SIDE B

RECHARGEABLE BATTERY(NC-5WM)
ニッケルカドミウム

OR

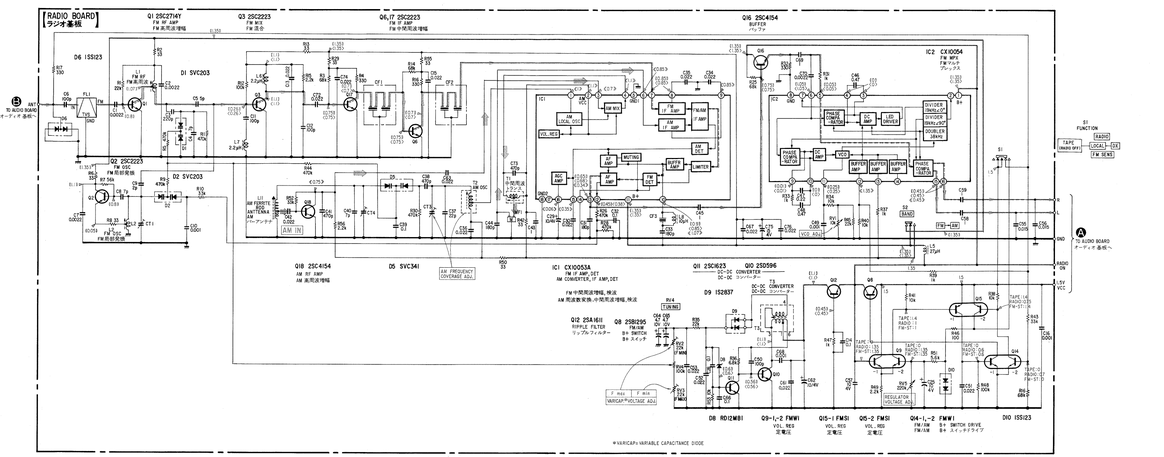
DRY BATTERY(IEC DESIGNATION R6)
乾電池
SUM 3 1.5V

DC IN 1.5V

MPP-201
REC/PB HEAD
録再ヘッド

【HEAD FLEXIBLE BOARD】
【ヘッド フレキシブル基板】

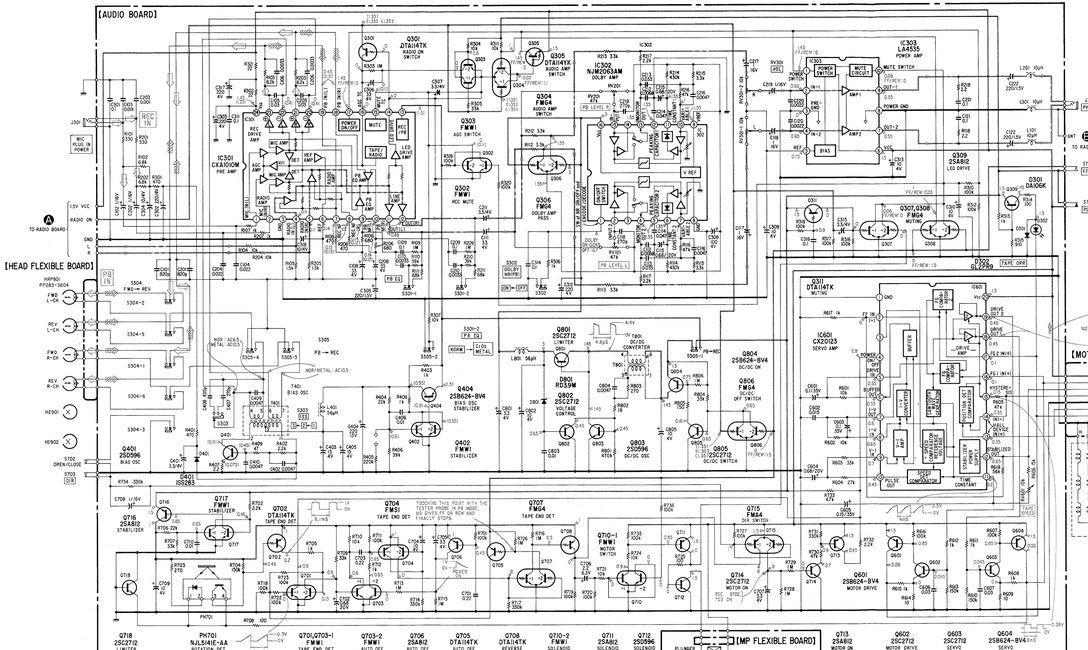
4-2. SCHEMATIC DIAGRAM — Radio Board —



Note:

- **All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.**
- **All resistors are in Ω and 1/4W or less unless otherwise specified.**
- ⊖ : B+ bus.
- ⊖ : adjustment for repair.
- ⊖ Voltages are dc with respect to ground unless otherwise noted.
- ⊖ Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
  No mark: PLAY MODE
  ( ): REC mode
  (( )): FM mode
  ( ): AM mode
- ⊖ Voltage variations may be noted due to normal production tolerances.
- ⊖ Power voltage is 1.5 V and fed with a regulated dc power supply from the battery terminal.
- ⊖ Waveforms are taken to ground in PB mode by using oscilloscope.

4-3. SCHEMATIC DIAGRAM — Audio Board —

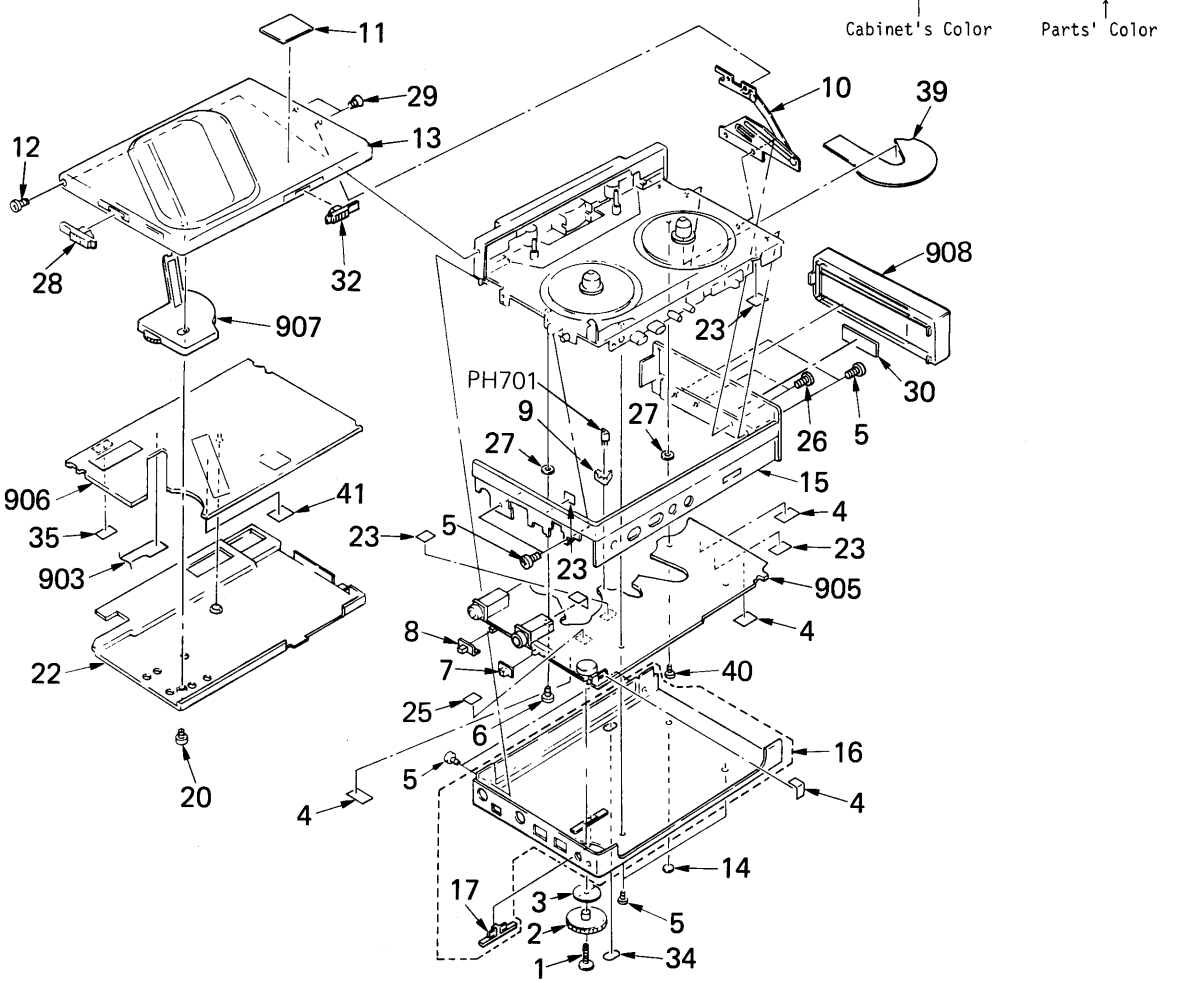


WM-F200II/F203

SECTION 5
EXPLODED VIEWS AND PARTS LIST

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color Indication of Appearance Parts
  Example: (RED) ..... KNOB, BALANCE (WHITE)
  (RED) = Cabinet's Color; (WHITE) = Parts' Color

5-1.

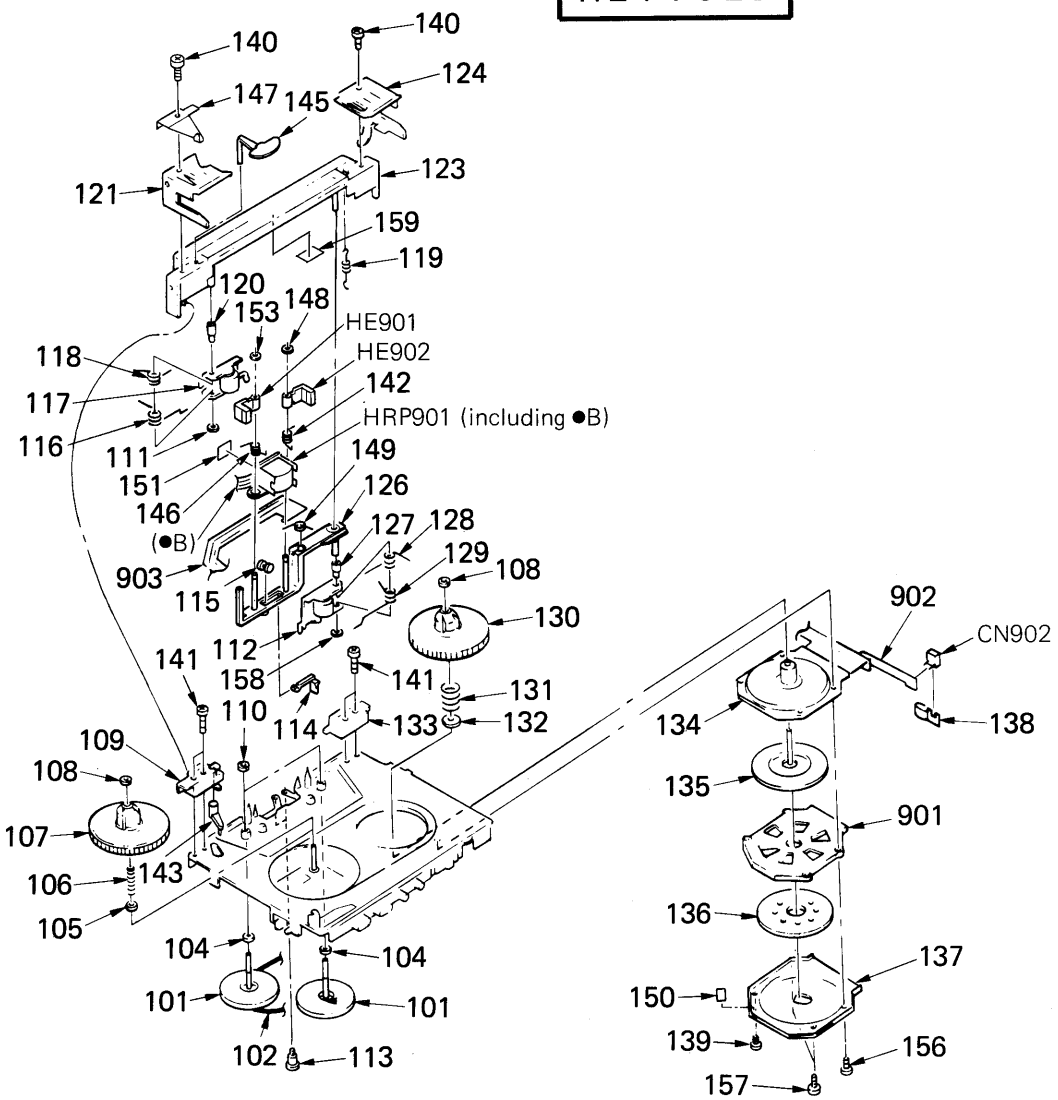


No.	Part No.	Description	Remarks
1	3-340-031-01	SCREW (M1.4X5), VOL FITTING	
2	3-338-659-01	KNOB, VOL	
3	3-315-467-00	WASHER, CONTROL	
4	3-831-441-XX	SPACER, KNOB	
5	3-704-197-01	SCREW (M1.4X1.6), NYLON	
6	3-335-797-01	SCREW (M1.4X2), TOOTHED LOCK	
7	3-333-140-01	KNOB, TAPE SW	
8	3-333-141-01	KNOB, DOLBY SW	
9	3-329-761-01	ADJUSTOR, REFLECTOR	
10	X-3329-738-1	BRACKET (T) ASSY, ARM	
11	3-703-710-01	STICKER, SONY SYMBOL (12)	
12	3-704-259-01	SCREW (M1.4X3),STEP	
13	X-3331-021-1	(US,Canadian:BLACK)..PANEL ASSY, CASSETTE	
	X-3331-022-1	(E:GOLD).....PANEL ASSY, CASSETTE	
14	*3-341-407-01	(BLACK)....PLATE, ORNAMENTAL, HOLE	
	*3-341-407-21	(E,GOLD)...PLATE, ORNAMENTAL, HOLE	
15	X-3331-015-1	ORNAMENT ASSY, REEL	
16	X-3331-019-1	(E,BLACK).....PANEL ASSY, CONTROL	
	X-3331-020-1	(E,GOLD).....PANEL ASSY, CONTROL	
	X-3331-023-1	(US,Canadian:BLACK)...PANEL ASSY, CONTROL	
17	3-333-143-01	KNOB, ISS SW	

No.	Part No.	Description	Remarks
20	3-704-243-41	SCREW (P1.7X3.0)	
22	3-338-661-01	PLATE, BLIND, PANEL	
23	3-327-119-01	SHEET (B), INSULATING	
25	3-703-929-01	SPACER (P)	
26	3-703-816-31	SCREW (M1.4X1.6), SPECIAL HEAD	
27	*3-341-435-11	SPACER, C (t=0.5)	
28	3-338-655-01	KNOB, FUNCTION	
29	7-627-451-07	SCREW, PRECISION +K 1.4X1.6	
30	*3-701-999-00	(US).....LABEL, SERIAL NUMBER	
	*3-704-222-01	(Canadian,E)...LABEL, SERIAL NUMBER	
32	3-338-653-01	KNOB, BAND	
34	3-333-162-11	(BLACK).....SHEET, AZIMUTH HOLE	
	3-333-162-41	(E,GOLD)....SHEET, AZIMUTH HOLE	
35	3-324-728-01	SHEET (LC)	
39	3-333-163-01	SHEET,INSULATING, SHIELD PLATE	
40	3-331-665-01	SCREW (M1.4), PRECISION STEP	
41	4-017-441-01	CUSHION (B)	
903	1-618-640-11	PC BOARD, RADIO CONNECTION	
905	A-3070-199-A	PC BOARD ASSY, AU	
906	A-3089-284-A	PC BOARD ASSY, RADIO	
907	1-237-792-11	TUNING UNIT	
908	1-550-316-11	CASE, BATTERY (NICKEL CADMIUM)	
	1-550-317-11	CASE, BATTERY (DRY BATTERY)	
PH701	8-719-751-42	DIODE NJL5141E-AA	

REVISED

5-2.

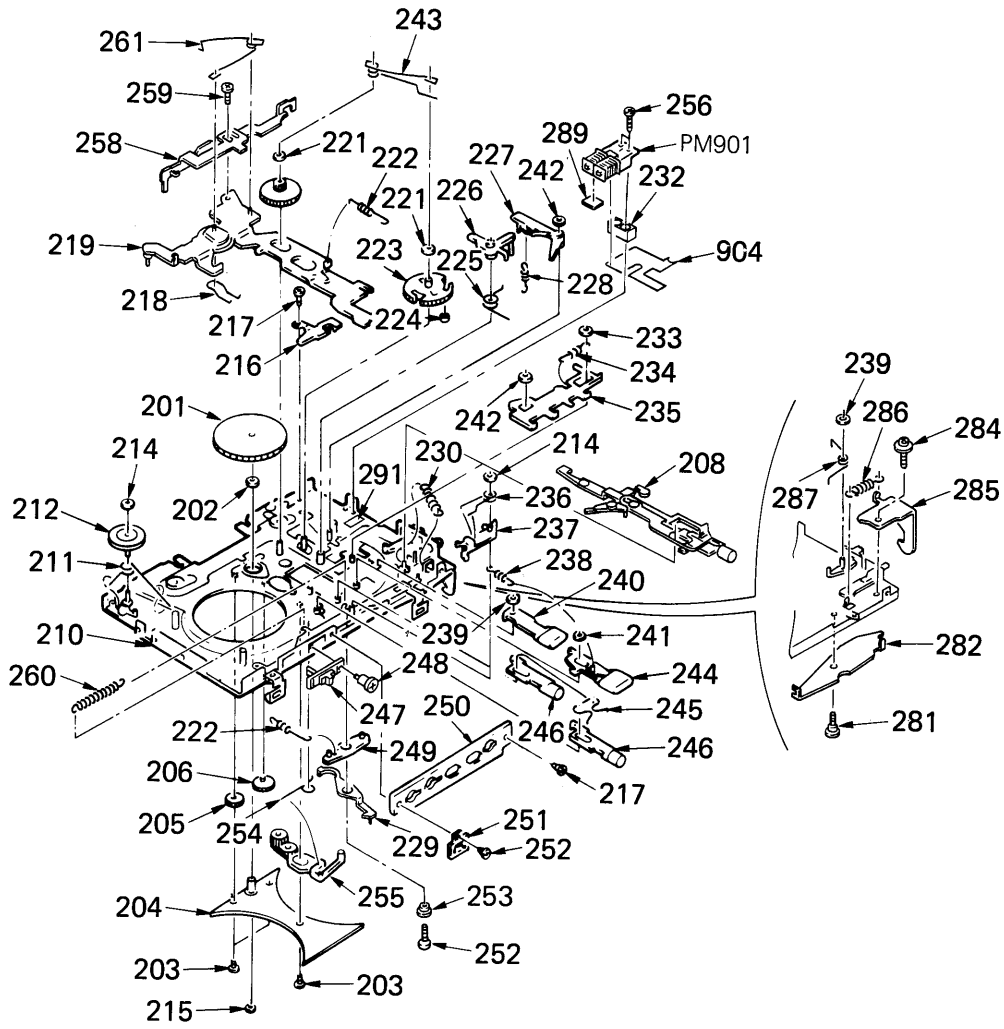


No.	Part No.	Description	Remarks
101	X-3329-707-1	FLYWHEEL (R.S) ASSY	
102	3-329-695-01	BELT	
104	3-321-394-21	WASHER	
105	3-315-415-21	WASHER (1.5-2.3)	
106	3-331-013-01	SPRING, COMPRESSION	
107	X-3329-705-1	GEAR (R) ASSY, T REEL	
108	3-315-384-11	WASHER, STOPPER	
109	3-329-736-01	GUIDE (RIGHT), HOLDER	
110	3-331-007-01	WASHER	
111	3-331-036-01	WASHER (t=0.25)	
	3-331-036-11	WASHER (t=0.19)	
112	X-3329-697-1	PINCH LEVER (R) ASSY	
113	3-331-097-01	SCREW, AZIMUTH	
114	3-333-101-01	LEVER, AZIMUTH	
115	3-333-102-01	SHAFT, AZIMUTH	
116	3-333-111-01	SPRING (N)	
117	X-3329-698-1	PINCH LEVER (N) ASSY	
118	3-333-109-01	SPRING (N)	
119	3-331-012-01	SPRING (HOLDER), TENSION	
120	3-329-637-01	COLLAR, PINCH LEVER	
121	3-329-714-01	HOLDER (RIGHT), CASSETTE	
123	X-3329-708-1	HOLDER (TD) ASSY	
124	3-329-713-01	HOLDER (LEFT), CASSETTE	
126	X-3329-683-1	LEVER ASSY, HEAD	
127	3-331-027-01	COLLAR (R), PINCH LEVER	
128	3-333-110-01	SPRING (R)	
129	3-329-643-01	SPRING (R)	
130	3-329-729-01	GEAR, SUPPLY REEL	
131	3-331-014-01	SPRING, COMPRESSION	
132	3-320-354-01	WASHER	

No.	Part No.	Description	Remarks
133	3-329-737-01	GUIDE (LEFT), HOLDER	
134	X-3329-625-1	CHASSIS ASSY, MOTOR	
135	A-3133-236-A	WHEEL BLOCK ASSY, MOTOR	
136	3-333-173-01	PLATE (S), HYSTERESIS	
137	*3-333-126-01	PLATE (R), SHIELD, MOTOR	
138	3-335-977-01	SPRING	
139	7-627-551-98	PRECISION SCREW +P 1.4X2.2	
140	3-341-432-41	SCREW (M1.4X2.5), TAPPING	
141	3-704-244-61	SCREW (P1.7X4.0)	
142	3-333-105-01	SPRING (B)	
143	3-329-690-01	GUIDE, MARKER	
145	3-333-108-01	LEVER, INDICATION	
146	3-333-104-01	SPRING (A)	
147	3-333-107-01	SPRING	
148	3-335-902-01	WASHER (t=0.25)	
149	3-333-123-01	SPRING (B)	
150	*3-335-904-01	SHEET, INSULATING	
151	*3-338-667-01	SHEET, ADHESIVE, DOUBLE-FACE	
153	3-335-902-11	WASHER (t=0.35)	
156	3-703-816-71	SCREW (M1.4X3.0), SPECIAL HEAD	
157	3-338-687-11	SCREW (M1.4X3), TAPPING	
158	3-331-036-01	WASHER (t=0.25)	
159	3-341-453-01	SHEET, INSULATING	
901	1-462-230-11	COIL, MOTOR (STATOR)	
902	1-618-639-11	PC BOARD, MOTOR CONNECTION	
903	1-618-640-11	PC BOARD, RADIO CONNECTION	

CN902 1-506-573-12 CONNECTOR 2P
HE901,HE902 A-3164-345-A LEVER BLOCK ASSY, ERASE (N)
HRP901 1-543-308-11 HEAD, MAGNETIC

5-3.



No.	Part No.	Description	Remarks
201	X-3329-749-1	PULLEY (B) COMP ASSY, MIDWAY	
202	3-321-394-21	WASHER	
203	3-331-047-01	SCREW (M1.4X1.4), SPECIAL HEAD	
204	X-3329-618-1	COVER ASSY, REEL	
205	3-329-689-01	GEAR (B), T	
206	3-329-688-01	GEAR (A), T	
208	X-3329-627-1	LEVER (A) ASSY, REC	
210	A-3035-217-A	CHASSIS COMP (R) ASSY	
211	3-341-440-01	SPRING (R)	
212	3-338-628-01	WHEEL, REVERSE	
214	3-331-036-01	WASHER (t = 0.25)	
	3-331-036-11	WASHER (t = 0.19)	
215	3-331-007-01	WASHER	
216	3-329-685-01	SPRING (A)	
217	3-703-816-31	SCREW (M1.4X1.6), SPECIAL HEAD	
218	3-329-698-01	SPRING (B)	
219	X-3329-699-1	LEVER (AD) ASSY, DRIVING	
220	3-329-687-01	GEAR, DRIVING	
221	3-311-815-31	WASHER, STOPPER	
222	3-341-441-01	SPRING, TENSION	
223	3-329-730-01	GEAR, CAM	
224	3-329-693-01	COLLAR, CAM GEAR	
225	3-329-700-01	SPRING	
226	3-329-733-01	LEVER (A), SHUT-OFF	
227	X-3329-615-1	LEVER ASSY, TRIGGER	
228	3-338-623-01	SPRING, TENSION	
229	X-3331-011-1	LEVER (A) ASSY, SELECT	
230	3-331-083-01	SPRING, TENSION	
232	*3-331-041-01	BRACKET, P	
233	3-578-224-00	WASHER	
234	3-331-009-01	SPRING (LOCK LEVER), TENSION	
235	3-329-731-01	LEVER, LOCK	
236	3-329-702-01	SPRING	
237	3-329-692-05	LEVER, SW	
238	3-331-111-01	SPRING (STOP LECER), TENSION	

No.	Part No.	Description	Remarks
239	3-578-242-21	WASHER (t=0.188)	
240	X-3329-620-1	LEVER ASSY, PLAY	
241	3-341-434-01	WASHER, STOPPER	
242	3-315-384-21	WASHER, STOPPER	
243	3-338-643-01	SPRING	
244	X-3329-636-1	LEVER ASSY, STOP	
245	3-331-016-01	SPRING	
246	X-3329-621-1	LEVER (A) ASSY, F.R	
247	3-333-115-01	KNOB, SAFETY LOCK	
248	3-329-697-01	SCREW, STEP, PRECISION	
249	X-3329-617-1	LEVER (B) ASSY, DRIVING	
250	*3-329-734-01	HOLDER, BUTTON	
251	3-331-043-01	SPRING	
252	3-703-816-02	SCREW (M1.4X2.0), SPECIAL HEAD	
253	3-331-694-01	LEVER (B) SHAFT, DRIVING	
254	3-329-699-01	SPRING	
255	X-3329-626-1	LEVER (B) ASSY, F.R	
256	7-627-551-37	SCREW, PRECISION +P 1.4X5	
258	X-3329-682-1	LEVER (A) ASSY, ERASE	
259	3-329-696-01	SCREW, ERASE LEVER	
260	3-335-931-01	SPRING (SELECT LEVER), TENSION	
261	3-338-642-01	SPRING	
281	3-333-124-01	SCREW (M1.4), STEP, PRECISION	
282	*3-335-942-01	LEVER (B), EJECT	
284	3-338-625-01	SCREW (M1.4X1.4), WASHER HEAD	
285	*3-335-943-01	LEVER (A), EJECT	
286	3-337-964-01	SPRING, TENSION (EJECT LEVER A)	
287	3-333-106-01	SPRING	
289	*3-338-668-01	SHEET	
291	3-335-905-01	SHEET, ADHESIVE, DOUBLE-FACE	
904	1-618-641-11	PC BOARD, MP FLEXIBLE	
PM901	1-454-406-12	SOLENOID, PLUNGER	

SECTION 6
ELECTRICAL PARTS LIST

NOTE:
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description		
901	1-462-230-11	COIL, MOTOR (STATOR)		
902	1-618-639-11	PC BOARD, MOTOR CONNECTION		
903	1-618-640-11	PC BOARD, RADIO CONNECTION		
904	1-618-641-11	PC BOARD, MP FLEXIBLE		
905	A-3070-199-A	PC BOARD ASSY, AU		
906	A-3089-284-A	PC BOARD ASSY, RADIO		
907	1-237-792-11	TUNING UNIT		
908	1-550-316-11	CASE, BATTERY (NICKEL CADMIUM)		
	1-550-317-11	CASE, BATTERY (DRY BATTERY)		
C1	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V
C2	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V
C3	1-162-962-91	CERAMIC CHIP 470PF	10%	50V
C4	1-162-975-91	CERAMIC CHIP 24PF	5%	50V
C5	1-162-936-11	CERAMIC CHIP 5PF	0.25PF	50V
C6	1-162-953-11	CERAMIC CHIP 100PF	5%	50V
C7	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V
C8	1-162-996-91	CERAMIC CHIP 7PF	0.5PF	50V
C9	1-162-932-11	CERAMIC CHIP 2PF	0.25PF	50V
C10	1-163-603-91	CERAMIC CHIP 75PF	5%	50V
C11	1-162-953-11	CERAMIC CHIP 100PF	5%	50V
C12	1-162-953-11	CERAMIC CHIP 100PF	5%	50V
C13	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C14	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C15	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C16	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C17	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C19	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C20	1-162-997-91	CERAMIC CHIP 10PF	0.5PF	50V
C21	1-135-158-85	TANTAL. CHIP 15MF	10%	4V
C25	1-135-104-00	TANTAL. CHIP 10MF	10%	4V
C28	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C29	1-135-104-00	TANTAL. CHIP 10MF	10%	4V
C30	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C31	1-162-956-11	CERAMIC CHIP 180PF	5%	50V
C32	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C33	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C34	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C35	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C36	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C37	1-162-998-91	CERAMIC CHIP 22PF	5%	50V
C38	1-163-622-91	CERAMIC CHIP 470PF	5%	50V
C39	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C40	1-162-996-91	CERAMIC CHIP 7PF	0.5PF	50V
C41	1-162-962-91	CERAMIC CHIP 470PF	10%	50V
C42	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C43	1-162-638-11	CERAMIC CHIP 1MF		16V

ELECTRICAL PARTS

Ref.No.	Part No.	Description		
C44	1-162-956-11	CERAMIC CHIP 180PF	5%	50V
C45	1-162-638-11	CERAMIC CHIP 1MF		16V
C46	1-162-637-11	CERAMIC CHIP 0.47MF		16V
C47	1-163-081-00	CERAMIC CHIP 0.22MF		25V
C48	1-162-637-11	CERAMIC CHIP 0.47MF		16V
C49	1-163-205-00	CERAMIC CHIP 0.001MF	5%	50V
C50	1-162-953-11	CERAMIC CHIP 100PF	5%	50V
C51	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C52	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C53	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C55	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V
C56	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V
C57	1-135-104-00	TANTAL. CHIP 10MF	10%	4V
C58	1-162-638-11	CERAMIC CHIP 1MF		16V
C59	1-162-638-11	CERAMIC CHIP 1MF		16V
C61	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C62	1-135-104-00	TANTAL. CHIP 10MF	10%	4V
C63	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C64	1-135-096-21	TANTAL. CHIP 4.7MF	10%	10V
C65	1-135-096-21	TANTAL. CHIP 4.7MF	10%	10V
C66	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C67	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C68	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C69	1-162-638-11	CERAMIC CHIP 1MF		16V
C70	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V
C72	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C73	1-163-622-91	CERAMIC CHIP 470PF	5%	50V
C74	1-162-995-91	CERAMIC CHIP 0.022MF	99%	50V
C101	1-163-139-00	CERAMIC CHIP 820PF	10%	50V
C102	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C103	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V
C104	1-163-033-00	CERAMIC CHIP 0.022MF	10%	25V
C105	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V
C106	1-163-015-00	CERAMIC CHIP 0.0033MF	10%	50V
C108	1-135-105-00	TANTAL. CHIP 33MF	20%	4V
C109	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C110	1-163-015-00	CERAMIC CHIP 0.0033MF	10%	50V
C111	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V
C112	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V
C113	1-163-074-00	CERAMIC CHIP 0.033MF	5%	25V
C114	1-163-075-00	CERAMIC CHIP 0.047MF	10%	25V
C115	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V
C116	1-163-017-00	CERAMIC CHIP 0.0047MF	5%	50V
C117	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C118	1-163-127-00	CERAMIC CHIP 270PF	10%	50V
C119	1-135-091-00	TANTAL. CHIP 1MF	20%	16V

ELECTRICAL PARTS

Ref.No.	Part No.	Description		
C120	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V
C121	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C122	1-124-947-11	ELECT 220MF	20%	1.5V
C201	1-163-139-00	CERAMIC CHIP 820PF	10%	50V
C202	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C203	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V
C204	1-163-033-00	CERAMIC CHIP 0.022MF	10%	25V
C205	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V
C206	1-163-015-00	CERAMIC CHIP 0.0033MF	10%	50V
C208	1-135-105-00	TANTAL. CHIP 33MF	20%	4V
C209	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C210	1-163-015-00	CERAMIC CHIP 0.0033MF	10%	50V
C211	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V
C212	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V
C213	1-163-074-00	CERAMIC CHIP 0.033MF	5%	25V
C214	1-163-075-00	CERAMIC CHIP 0.047MF	10%	25V
C215	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V
C216	1-163-017-00	CERAMIC CHIP 0.0047MF	5%	50V
C217	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C218	1-163-127-00	CERAMIC CHIP 270PF	10%	50V
C219	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C220	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V
C221	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C222	1-124-947-11	ELECT 220MF	20%	1.5V
C301	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C302	1-124-434-00	ELECT 220MF	20%	4V
C303	1-124-434-00	ELECT 220MF	20%	4V
C304	1-135-104-00	TANTAL. CHIP 10MF	20%	4V
C305	1-124-947-11	ELECT 220MF	20%	1.5V
C306	1-124-431-00	ELECT 33MF	20%	4V
C307	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V
C308	1-124-433-00	ELECT 100MF	20%	4V
C309	1-135-104-00	TANTAL. CHIP 10MF	20%	4V
C310	1-135-104-00	TANTAL. CHIP 10MF	20%	4V
C311	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C312	1-124-434-00	ELECT 220MF	20%	4V
C313	1-135-104-00	TANTAL. CHIP 10MF	20%	4V
C314	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C315	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V
C316	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C317	1-124-434-00	ELECT 220MF	20%	4V
C318	1-135-104-00	TANTAL. CHIP 10MF	20%	4V
C319	1-163-117-01	CERAMIC CHIP 100PF	10%	4V
C401	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V
C402	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C403	1-135-158-91	TANTAL. CHIP 15MF	20%	4V
C404	1-124-947-11	ELECT 220MF	20%	1.5V
C405	1-135-158-91	TANTAL. CHIP 15MF	20%	4V
C406	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C407	1-163-127-00	CERAMIC CHIP 270PF	5%	50V
C408	1-163-132-00	CERAMIC CHIP 430PF	5%	50V
C409	1-162-625-11	CERAMIC CHIP 0.0047MF	5%	50V
C410	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C601	1-135-070-00	TANTAL. CHIP 0.1MF	10%	35V
C602	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V
C603	1-135-070-00	TANTAL. CHIP 0.1MF	10%	35V
C604	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V
C605	1-135-071-21	TANTAL. CHIP 0.15MF	10%	35V

ELECTRICAL PARTS

Ref.No.	Part No.	Description		
C606	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V
C607	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V
C701	1-163-081-00	CERAMIC CHIP 0.22MF		25V
C702	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V
C703	1-163-081-00	CERAMIC CHIP 0.22MF		25V
C704	1-135-104-00	TANTAL. CHIP 10MF	20%	4V
C705	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V
C706	1-135-099-00	TANTAL. CHIP 2.2MF	20%	6.3V
C707	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V
C708	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C709	1-135-104-00	TANTAL. CHIP 10MF	20%	4V
C710	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C801	1-135-103-00	TANTAL. CHIP 3.3MF	20%	4V
C802	1-135-104-00	TANTAL. CHIP 10MF	20%	4V
C803	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C804	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C805	1-135-104-00	TANTAL. CHIP 10MF	20%	4V
C901	1-124-776-11	ELECT 150MF	20%	4V
CF1	1-567-338-65	FILTER, CERAMIC		
CF2	1-567-338-65	FILTER, CERAMIC		
CF3	1-567-338-65	FILTER, CERAMIC		
CN902	1-506-573-12	CONNECTOR 2P		
CT1	1-141-333-11	CAP, VAR, TRIMMER		
CT3	1-141-333-11	CAP, VAR, TRIMMER		
CT4	1-141-333-11	CAP, VAR, TRIMMER		
D1	8-719-939-02	DIODE SVC203CP		
D2	8-719-939-02	DIODE SVC203CP		
D5	8-719-945-30	DIODE SVC341-K		
D6	8-719-101-23	DIODE 1SS123		
D8	8-719-106-70	DIODE RD12M		
D9	8-719-100-05	DIODE 1S2837		
D10	8-719-101-23	DIODE 1SS123		
D301	8-719-908-30	DIODE DA106K		
D302	1-807-305-11	DIODE GL2PR9 (LED)		
D401	8-719-118-21	DIODE 1SS283		
D801	8-719-105-57	DIODE RD3.9M-B2		
FL1	1-236-053-21	FILTER, BAND PASS		
HE901	A-3164-345-A	LEVER BLOCK ASSY, ERASE (N)		
HE902	A-3164-346-A	LEVER BLOCK ASSY, ERASE (R)		
HRP901	1-543-308-11	HEAD, MAGNETIC		
IC1	8-759-923-96	IC CX10053B		
IC2	8-759-910-53	IC CX10054		
IC301	8-752-030-34	IC CXA1010M		
IC302	8-759-701-07	IC NJM2063AM		
IC303	8-759-802-80	IC LA4535M		
IC601	8-752-012-32	IC CX20123		
J301	1-562-975-21	JACK (MIC)		
J302	1-562-975-11	JACK (PHONES)		
JR1	1-216-864-11	METAL CHIP 0	5%	1/16W
JR2	1-216-864-11	METAL CHIP 0	5%	1/16W
JR3	1-216-864-11	METAL CHIP 0	5%	1/16W
JR4	1-216-864-11	METAL CHIP 0	5%	1/16W
JR5	1-216-864-11	METAL CHIP 0	5%	1/16W
JR6	1-216-864-11	METAL CHIP 0	5%	1/16W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
JR7	1-216-864-11	METAL CHIP	0	5%	1/16W
JR8	1-216-864-11	METAL CHIP	0	5%	1/16W
JR9	1-216-864-11	METAL CHIP	0	5%	1/16W
JR10	1-216-864-11	METAL CHIP	0	5%	1/16W
JR11	1-216-864-11	METAL CHIP	0	5%	1/16W
JR12	1-216-864-11	METAL CHIP	0	5%	1/16W
JR13	1-216-296-00	METAL CHIP	0	5%	1/8W
JR14	1-216-296-00	METAL CHIP	0	5%	1/8W
JR15	1-216-296-00	METAL CHIP	0	5%	1/8W
JR16	1-216-296-00	METAL CHIP	0	5%	1/8W
JR17	1-216-296-00	METAL CHIP	0	5%	1/8W
JR19	1-216-296-00	METAL CHIP	0	5%	1/8W
JR20	1-216-296-00	METAL CHIP	0	5%	1/8W
JR21	1-216-296-00	METAL CHIP	0	5%	1/8W
JR22	1-216-296-00	METAL CHIP	0	5%	1/8W
JR23	1-216-296-00	METAL CHIP	0	5%	1/8W
JR24	1-216-296-00	METAL CHIP	0	5%	1/8W
JR25	1-216-296-00	METAL CHIP	0	5%	1/8W
JR26	1-216-296-00	METAL CHIP	0	5%	1/8W
JR27	1-216-864-11	METAL CHIP	0	5%	1/16W
JR28	1-216-864-11	METAL CHIP	0	5%	1/16W
JR29	1-216-864-11	METAL CHIP	0	5%	1/16W
JR30	1-216-864-11	METAL CHIP	0	5%	1/16W
JR31	1-216-864-11	METAL CHIP	0	5%	1/16W
JR301	1-216-296-00	METAL CHIP	0	5%	1/8W
JR302	1-216-296-00	METAL CHIP	0	5%	1/8W
JR303	1-216-296-00	METAL CHIP	0	5%	1/8W
JR304	1-216-296-00	METAL CHIP	0	5%	1/8W
JR305	1-216-296-00	METAL CHIP	0	5%	1/8W
JR306	1-216-296-00	METAL CHIP	0	5%	1/8W
JR307	1-216-296-00	METAL CHIP	0	5%	1/8W
JR308	1-216-296-00	METAL CHIP	0	5%	1/8W
JR309	1-216-296-00	METAL CHIP	0	5%	1/8W
JR310	1-216-296-00	METAL CHIP	0	5%	1/8W
JR311	1-216-296-00	METAL CHIP	0	5%	1/8W
JR312	1-216-296-00	METAL CHIP	0	5%	1/8W
JR314	1-216-296-00	METAL CHIP	0	5%	1/8W
JR315	1-216-295-00	METAL CHIP	0	5%	1/10W
JR317	1-216-295-00	METAL CHIP	0	5%	1/10W
L1	1-459-641-41	COIL (WITH CORE)			
L2	1-459-641-41	COIL (WITH CORE)			
L5	1-410-209-51	INDUCTOR CHIP 27UH			
L6	1-410-196-11	INDUCTOR CHIP 2.2UH			
L7	1-410-196-11	INDUCTOR CHIP 2.2UH			
L8	1-410-204-41	INDUCTOR CHIP 10UH			
L11	1-402-282-21	ANTENNA, FERRITE-ROD (MW)			
L101	1-410-204-41	INDUCTOR CHIP 10UH			
L201	1-410-204-41	INDUCTOR CHIP 10UH			
L301	1-410-204-41	INDUCTOR CHIP 10UH			
L401	1-410-213-51	INDUCTOR CHIP 56UH			
L801	1-410-213-51	INDUCTOR CHIP 56UH			
MF1	1-567-693-11	FILTER, CERAMIC			
PH701	8-719-751-42	DIODE NJL5141E-AA			
PM901	1-454-406-12	SOLENOID, PLUNGER			

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
Q1	8-729-200-87	TRANSISTOR 2SC2714Y			
Q2	8-729-172-72	TRANSISTOR 2SC2757			
Q3	8-729-102-06	TRANSISTOR 2SC2223			
Q6	8-729-102-06	TRANSISTOR 2SC2223			
Q8	8-729-807-87	TRANSISTOR 2SB1295-UL6			
Q9	8-729-903-10	TRANSISTOR FMW1			
Q10	8-729-159-64	TRANSISTOR 2SD596			
Q11	8-729-100-66	TRANSISTOR 2SC1623			
Q12	8-729-602-36	TRANSISTOR 2SA1602			
Q14	8-729-903-10	TRANSISTOR FMW1			
Q15	8-729-902-96	TRANSISTOR FMS1			
Q16	8-729-602-21	TRANSISTOR 2SC4154			
Q17	8-729-102-06	TRANSISTOR 2SC2223			
Q18	8-729-602-21	TRANSISTOR 2SC4154			
Q301	8-729-900-51	TRANSISTOR DTA114TK			
Q302	8-729-903-10	TRANSISTOR FMW1			
Q303	8-729-903-10	TRANSISTOR FMW1			
Q304	8-729-902-93	TRANSISTOR FMG4			
Q305	8-729-901-46	TRANSISTOR DTA114YK			
Q306	8-729-902-93	TRANSISTOR FMG4			
Q307	8-729-902-93	TRANSISTOR FMG4			
Q308	8-729-902-93	TRANSISTOR FMG4			
Q309	8-729-100-76	TRANSISTOR 2SA812			
Q311	8-729-900-51	TRANSISTOR DTA114TK			
Q401	8-729-159-64	TRANSISTOR 2SD596			
Q402	8-729-903-10	TRANSISTOR FMW1			
Q404	8-729-602-44	TRANSISTOR 2SB624-BV4			
Q601	8-729-602-44	TRANSISTOR 2SB624-BV4			
Q602	8-729-100-66	TRANSISTOR 2SC1623			
Q603	8-729-100-66	TRANSISTOR 2SC1623			
Q604	8-729-162-44	TRANSISTOR 2SB624-BV4			
Q701	8-729-903-10	TRANSISTOR FMW1			
Q702	8-729-900-51	TRANSISTOR DTA114TK			
Q703	8-729-903-10	TRANSISTOR FMW1			
Q704	8-729-902-96	TRANSISTOR FMS1			
Q705	8-729-900-51	TRANSISTOR DTA114TK			
Q706	8-729-100-76	TRANSISTOR 2SA812			
Q707	8-729-902-93	TRANSISTOR FMG4			
Q708	8-729-900-51	TRANSISTOR DTA114TK			
Q710	8-729-903-10	TRANSISTOR FMW1			
Q711	8-729-100-76	TRANSISTOR 2SA812			
Q712	8-729-159-64	TRANSISTOR 2SD596			
Q713	8-729-100-76	TRANSISTOR 2SA812			
Q714	8-729-100-66	TRANSISTOR 2SC1623			
Q715	8-729-902-90	TRANSISTOR FMA4			
Q716	8-729-100-76	TRANSISTOR 2SA812			
Q717	8-729-903-10	TRANSISTOR FMW1			
Q718	8-729-100-66	TRANSISTOR 2SC1623			
Q801	8-729-100-66	TRANSISTOR 2SC1623			
Q802	8-729-100-66	TRANSISTOR 2SC1623			
Q803	8-729-159-64	TRANSISTOR 2SD596			
Q804	8-729-162-44	TRANSISTOR 2SB624			
Q805	8-729-100-66	TRANSISTOR 2SC1623			
Q806	8-729-902-93	TRANSISTOR FMG4			
R1	1-216-837-11	METAL CHIP	22K	5%	1/16W
R2	1-216-809-11	METAL CHIP	100	5%	1/16W
R3	1-216-845-11	METAL CHIP	100K	5%	1/16W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R4	1-216-815-11	METAL CHIP	330	5%	1/16W
R5	1-216-853-11	METAL CHIP	470K	5%	1/16W
R6	1-216-812-11	METAL CHIP	180	5%	1/16W
R7	1-216-842-91	METAL CHIP	56K	5%	1/16W
R8	1-216-803-11	METAL CHIP	33	5%	1/16W
R9	1-216-853-11	METAL CHIP	470K	5%	1/16W
R10	1-216-839-11	METAL CHIP	33K	5%	1/16W
R11	1-216-853-11	METAL CHIP	470K	5%	1/16W
R12	1-216-845-11	METAL CHIP	100K	5%	1/16W
R13	1-216-803-11	METAL CHIP	33	5%	1/16W
R14	1-216-845-11	METAL CHIP	100K	5%	1/16W
R15	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R16	1-216-815-11	METAL CHIP	330	5%	1/16W
R19	1-216-843-11	METAL CHIP	68K	5%	1/16W
R20	1-216-815-11	METAL CHIP	330	5%	1/16W
R25	1-216-843-11	METAL CHIP	68K	5%	1/16W
R26	1-216-853-11	METAL CHIP	470K	5%	1/16W
R28	1-216-853-11	METAL CHIP	470K	5%	1/16W
R29	1-216-803-11	METAL CHIP	33	5%	1/16W
R30	1-216-853-11	METAL CHIP	470K	5%	1/16W
R31	1-216-821-11	METAL CHIP	1K	5%	1/16W
R32	1-216-815-11	METAL CHIP	330	5%	1/16W
R33	1-216-821-11	METAL CHIP	1K	5%	1/16W
R34	1-216-833-11	METAL CHIP	10K	5%	1/16W
R35	1-216-837-11	METAL CHIP	22K	5%	1/16W
R36	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R37	1-216-821-11	METAL CHIP	1K	5%	1/16W
R38	1-216-833-11	METAL CHIP	10K	5%	1/16W
R40	1-216-833-11	METAL CHIP	10K	5%	1/16W
R41	1-216-833-11	METAL CHIP	10K	5%	1/16W
R42	1-216-803-11	METAL CHIP	33	5%	1/16W
R43	1-216-839-11	METAL CHIP	33K	5%	1/16W
R44	1-216-853-11	METAL CHIP	470K	5%	1/16W
R45	1-216-837-11	METAL CHIP	22K	5%	1/16W
R46	1-216-809-11	METAL CHIP	100	5%	1/16W
R47	1-216-821-11	METAL CHIP	1K	5%	1/16W
R48	1-216-845-11	METAL CHIP	100K	5%	1/16W
R49	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R50	1-216-803-11	METAL CHIP	33	5%	1/16W
R51	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R52	1-216-839-11	METAL CHIP	33K	5%	1/16W
R53	1-216-833-11	METAL CHIP	10K	5%	1/16W
R55	1-216-803-11	METAL CHIP	33	5%	1/16W
R56	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R101	1-216-037-00	METAL CHIP	330	5%	1/10W
R102	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R103	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R104	1-216-073-00	METAL CHIP	10K	5%	1/10W
R105	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R106	1-216-045-00	METAL CHIP	680	5%	1/10W
R107	1-216-049-00	METAL CHIP	1K	5%	1/10W
R108	1-216-041-00	METAL CHIP	470	5%	1/10W
R109	1-216-121-00	METAL CHIP	1M	5%	1/10W
R110	1-216-748-11	METAL CHIP	39K	5%	1/10W
R111	1-216-093-00	METAL CHIP	68K	5%	1/10W
R112	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R113	1-216-061-00	METAL CHIP	3.3K	5%	1/10W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R114	1-216-112-00	METAL CHIP	430K	5%	1/10W
R115	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R116	1-216-089-00	METAL CHIP	47K	5%	1/10W
R117	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R118	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R201	1-216-037-00	METAL CHIP	330	5%	1/10W
R202	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R203	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R204	1-216-073-00	METAL CHIP	10K	5%	1/10W
R205	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R206	1-216-045-00	METAL CHIP	680	5%	1/10W
R207	1-216-049-00	METAL CHIP	1K	5%	1/10W
R208	1-216-041-00	METAL CHIP	470	5%	1/10W
R209	1-216-121-00	METAL CHIP	1M	5%	1/10W
R210	1-216-748-11	METAL CHIP	39K	5%	1/10W
R211	1-216-093-00	METAL CHIP	68K	5%	1/10W
R212	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R213	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R214	1-216-112-00	METAL CHIP	430K	5%	1/10W
R215	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R216	1-216-089-00	METAL CHIP	47K	5%	1/10W
R217	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R218	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R301	1-216-041-00	METAL CHIP	470	5%	1/10W
R302	1-216-009-00	METAL CHIP	22	5%	1/10W
R303	1-216-121-00	METAL CHIP	1M	5%	1/10W
R304	1-216-073-00	METAL CHIP	10K	5%	1/10W
R305	1-216-085-00	METAL CHIP	33K	5%	1/10W
R306	1-216-049-00	METAL CHIP	1K	5%	1/10W
R307	1-216-073-00	METAL CHIP	10K	5%	1/10W
R310	1-216-097-00	METAL CHIP	100K	5%	1/10W
R311	1-216-073-00	METAL CHIP	10K	5%	1/10W
R312	1-216-097-00	METAL CHIP	100K	5%	1/10W
R313	1-216-049-00	METAL CHIP	1K	5%	1/10W
R314	1-216-025-00	METAL CHIP	100	5%	1/10W
R315	1-216-048-00	METAL CHIP	910	5%	1/10W
R316	1-216-097-00	METAL CHIP	100K	5%	1/10W
R317	1-216-097-00	METAL CHIP	100K	5%	1/10W
R318	1-216-097-00	METAL CHIP	100K	5%	1/10W
R319	1-216-097-00	METAL CHIP	100K	5%	1/10W
R320	1-216-097-00	METAL CHIP	100K	5%	1/10W
R321	1-216-009-00	METAL CHIP	22	5%	1/10W
R401	1-216-041-00	METAL CHIP	470	5%	1/10W
R402	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R403	1-216-049-00	METAL CHIP	1K	5%	1/10W
R404	1-216-081-00	METAL CHIP	22K	5%	1/10W
R405	1-216-105-00	METAL CHIP	220K	5%	1/10W
R406	1-216-748-11	METAL CHIP	39K	5%	1/10W
R407	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R408	1-216-049-00	METAL CHIP	1K	5%	1/10W
R409	1-216-017-00	METAL CHIP	47	5%	1/10W
R601	1-216-073-00	METAL CHIP	10K	5%	1/10W
R602	1-216-073-00	METAL CHIP	10K	5%	1/10W
R603	1-216-085-00	METAL CHIP	33K	5%	1/10W
R604	1-216-083-00	METAL CHIP	27K	5%	1/10W
R605	1-216-089-00	METAL CHIP	47K	5%	1/10W
R606	1-216-077-00	METAL CHIP	15K	5%	1/10W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R607	1-216-097-00	METAL CHIP	100K	5%	1/10W
R608	1-216-049-00	METAL CHIP	1K	5%	1/10W
R609	1-216-001-00	METAL CHIP	10	5%	1/10W
R610	1-216-101-00	METAL CHIP	150K	5%	1/10W
R611	1-216-049-00	METAL CHIP	1K	5%	1/10W
R612	1-216-049-00	METAL CHIP	1K	5%	1/10W
R613	1-216-101-00	METAL CHIP	150K	5%	1/10W
R614	1-216-001-00	METAL CHIP	10	5%	1/10W
R615	1-216-049-00	METAL CHIP	1K	5%	1/10W
R616	1-216-097-00	METAL CHIP	100K	5%	1/10W
R617	1-216-049-00	METAL CHIP	1K	5%	1/10W
R618	1-216-091-00	METAL CHIP	56K	5%	1/10W
R701	1-216-097-00	METAL CHIP	100K	5%	1/10W
R702	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R703	1-216-035-00	METAL CHIP	270	5%	1/10W
R704	1-216-101-00	METAL CHIP	150K	5%	1/10W
R705	1-216-049-00	METAL CHIP	1K	5%	1/10W
R706	1-216-081-00	METAL CHIP	22K	5%	1/10W
R707	1-216-085-00	METAL CHIP	33K	5%	1/10W
R708	1-216-025-00	METAL CHIP	100	5%	1/10W
R709	1-216-085-00	METAL CHIP	33K	5%	1/10W
R710	1-216-073-00	METAL CHIP	10K	5%	1/10W
R711	1-216-097-00	METAL CHIP	100K	5%	1/10W
R712	1-216-198-00	METAL CHIP	1K	5%	1/8W
R713	1-216-121-00	METAL CHIP	1M	5%	1/10W
R714	1-216-109-00	METAL CHIP	330K	5%	1/10W
R715	1-216-121-00	METAL CHIP	1M	5%	1/10W
R716	1-216-121-00	METAL CHIP	1M	5%	1/10W
R717	1-216-109-00	METAL CHIP	330K	5%	1/10W
R718	1-216-097-00	METAL CHIP	100K	5%	1/10W
R719	1-216-097-00	METAL CHIP	100K	5%	1/10W
R720	1-216-097-00	METAL CHIP	100K	5%	1/10W
R721	1-216-073-00	METAL CHIP	10K	5%	1/10W
R722	1-216-097-00	METAL CHIP	100K	5%	1/10W
R723	1-216-097-00	METAL CHIP	100K	5%	1/10W
R724	1-216-073-00	METAL CHIP	10K	5%	1/10W
R725	1-216-025-00	METAL CHIP	100	5%	1/10W
R726	1-216-121-00	METAL CHIP	1M	5%	1/10W
R727	1-216-097-00	METAL CHIP	100K	5%	1/10W
R728	1-216-121-00	METAL CHIP	1M	5%	1/10W
R729	1-216-121-00	METAL CHIP	1M	5%	1/10W
R730	1-216-089-00	METAL CHIP	47K	5%	1/10W
R731	1-216-109-00	METAL CHIP	330K	5%	1/10W
R732	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R733	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R734	1-216-109-00	METAL CHIP	330K	5%	1/10W
R735	1-216-097-00	METAL CHIP	100K	5%	1/10W
R736	1-216-097-00	METAL CHIP	100K	5%	1/10W
R801	1-216-113-00	METAL CHIP	470K	5%	1/10W
R802	1-216-007-00	METAL CHIP	18	5%	1/10W
R803	1-216-035-00	METAL CHIP	270	5%	1/10W
R804	1-216-085-00	METAL CHIP	33K	5%	1/10W
R805	1-216-029-00	METAL CHIP	150	5%	1/10W
R806	1-216-121-00	METAL CHIP	1M	5%	1/10W
RV1	1-237-766-11	RES, ADJ, METAL GLAZE 10K (VOL)			
RV2	1-228-356-00	RES, ADJ, METAL GLAZE 22K (F MIN)			
RV3	1-228-356-00	RES, ADJ, METAL GLAZE 22K (F MAX)			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
RV4	1-230-979-11	RES, ADJ, METAL GLAZE 100K (TUNING)
RV5	1-230-429-11	RES, ADJ, METAL GLAZE 220K (B+)
RV101	1-237-006-11	RES, ADJ, METAL GLAZE 47K (PB LEVEL L)
RV201	1-237-006-11	RES, ADJ, METAL GLAZE 47K (PB LEVEL R)
RV301	1-230-955-21	RES, VAR, CARBON 10K/10K (VOLUME)
RV601	1-237-004-11	RES, ADJ, METAL GLAZE 10K (SPEED)
S1	1-571-121-21	SWITCH, SLIDE (TAPE-RADIO) FUNCTION
S2	1-571-120-21	SWITCH, SLIDE (BAND)
S301	1-554-613-00	SWITCH, SLIDE (PB EQ)
S302	1-570-397-11	SWITCH, SLIDE (DOLBY NR)
S303	1-570-402-11	SWITCH, SLIDE (ISS)
S304	1-570-399-11	SWITCH, SLIDE (FWD/REV)
S305	1-570-400-11	SWITCH, SLIDE (REC/PB)
S701	1-570-548-11	SWITCH, LEAF (POWER/FF.REW)
S702	1-570-398-11	SWITCH (OPEN/CLOSE)
S703	1-570-395-11	SWITCH, LEAF (DIRECTION)
T1	1-404-690-41	TRANSFORMER, IF (AM)
T2	1-406-177-41	COIL (AM OSC)
T3	1-448-302-11	TRANSFORMER, DC-DC CONVERTER
T401	1-433-310-11	TRANSFORMER, BIAS OSCILLATION
T801	1-447-864-11	TRANSFORMER, DC-DC CONVERTER

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-506-409-00	(E)....ADAPTOR, CONVERSION
1-528-176-11	BATTERY, STORAGE (NC-5WM)
⚠1-528-221-11	(US).....BATTERY CHARGER (BC-7F)
⚠1-528-224-11	(Canadian)...BATTERY CHARGER (BC-7F)
⚠1-528-232-11	(E).....BATTERY CHARGER
1-542-071-11	MICROPHONE (C-3001)
1-550-316-11	CASE, BATTERY (NICKEL CADMIUM)
1-550-317-11	CASE, BATTERY
2-357-928-01	(E)...EAR PAD
3-335-988-11	CUSHION (LOWER)
3-341-436-01	CUSHION (UPPER)
3-338-673-01	SPACER
3-341-408-01	CASE, CARRYING
3-341-444-01	(E).....INDIVIDUAL CARTON
3-341-445-01	(US).....INDIVIDUAL CARTON
3-341-446-01	(Canadian)...INDIVIDUAL CARTON
3-704-016-01	(E:BLACK)...LABEL, GENERAL DISCERN
3-704-018-01	(E:GOLD)....LABEL, DISCRIMINATION
3-704-222-01	LABEL, SERIAL NUMBER
3-764-193-11	(E)....INSTRUCTION
3-765-978-11	(E).....MANUAL, INSTRUCTION
3-765-978-21	(US,Canadian)...MANUAL, INSTRUCTION
3-765-978-31	(Canadian).....MANUAL, INSTRUCTION
3-795-748-21	(US)...SAFETY INSTRUCTIONS, HEADPHONE
8-952-266-94	(US,Canadian)...HEADPHONE MDR-A10L/B SET
8-952-321-90	(E).....EARPHONE MDR-E 434/B SET
X-3324-513-1	STAND ASSY, MICROPHONE
X-3329-657-1	(E).....EAR PAD ASSY (HEADPHONES)

Sony Corporation
Audio Group

9-952-849-11
(Including 9-952-849-91)

English
87H0646-1
Printed in Japan
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